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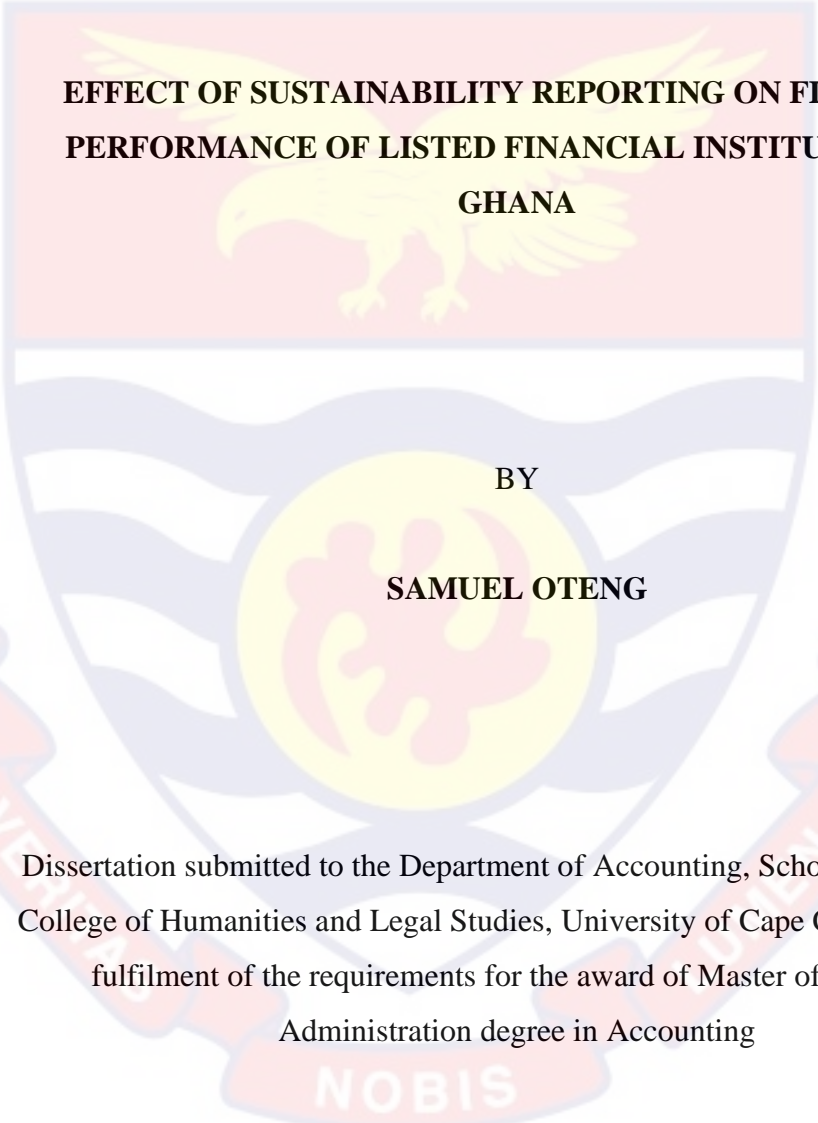


**EFFECT OF SUSTAINABILITY REPORTING ON FINANCIAL  
PERFORMANCE OF LISTED FINANCIAL INSTITUTIONS IN  
GHANA**

**SAMUEL OTENG**

2023

UNIVERSITY OF CAPE COAST



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GHANA**

BY

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Dissertation submitted to the Department of Accounting, School of Business,  
College of Humanities and Legal Studies, University of Cape Coast, in partial  
fulfilment of the requirements for the award of Master of Business  
Administration degree in Accounting

NOVEMBER, 2023

## DECLARATION

### Candidate's Declaration

I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature:..... Date:.....

Name: Samuel Oteng

### Supervisors' Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Signature:..... Date:.....

Name: Rev. Prof. George Tackie

## ABSTRACT

This research examines how reporting on sustainability affects Financial Performance of Listed Financial Institutions in Ghana. The study analyzed 12 sampled firms in Ghana from 2012-2021. Sustainability Reporting was measured using Global Reporting Initiative, Financial Services Sector Disclosure guidelines, while Firm Performance was measured using Return on Assets. The study used a cross-sectional design and quantitative research approach, employing the linear regression ordinary least square estimation technique for analysis. The results showed a significant positive relationship between Economic Disclosure Scores and the Financial Performance. The Environmental Disclosure Scores showed a positive insignificant effect on Financial Performance. The study found a negative insignificant relationship between Social Disclosure Scores and Financial Performance, with higher reporting for Economic Disclosure Scores, Social Disclosure Scores, and Environmental Disclosure Scores respectively. The study examined the restraining effects of Firm Size and Debt Ratio on the relationship between Sustainability Reporting and Financial Performance. The results showed a negative significant relationship between Debt Ratio and Financial Performance, while the relationship between Firm Size and Sustainability Reporting was positive but nonsignificant. The study recommends that financial institutions in Ghana adopt the Global Reporting Initiative content index template to disclose Sustainability Reporting. Also, Government of Ghana should establish an awarding scheme for firms that disclose sustainability information. Lastly, the study offers proof of the topic in scholarly works, especially in Africa, using data from Ghana.

## KEY WORDS

Financial Services Sector Disclosure

Global Reporting Initiative

Listed Financial Institutions

Sustainability Reporting

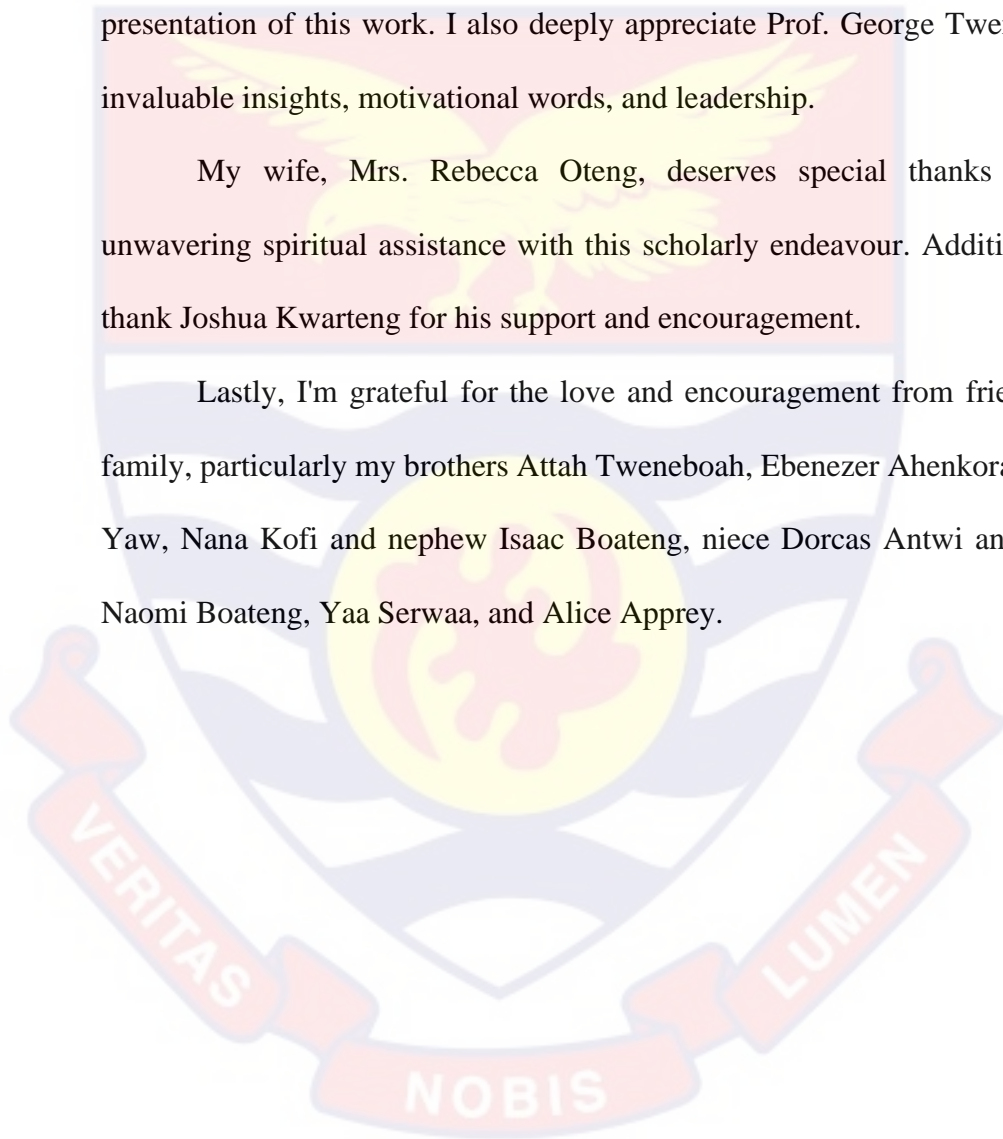


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## DEDICATION

To my lovely daughter, Anna Oteng-Aboagyee.



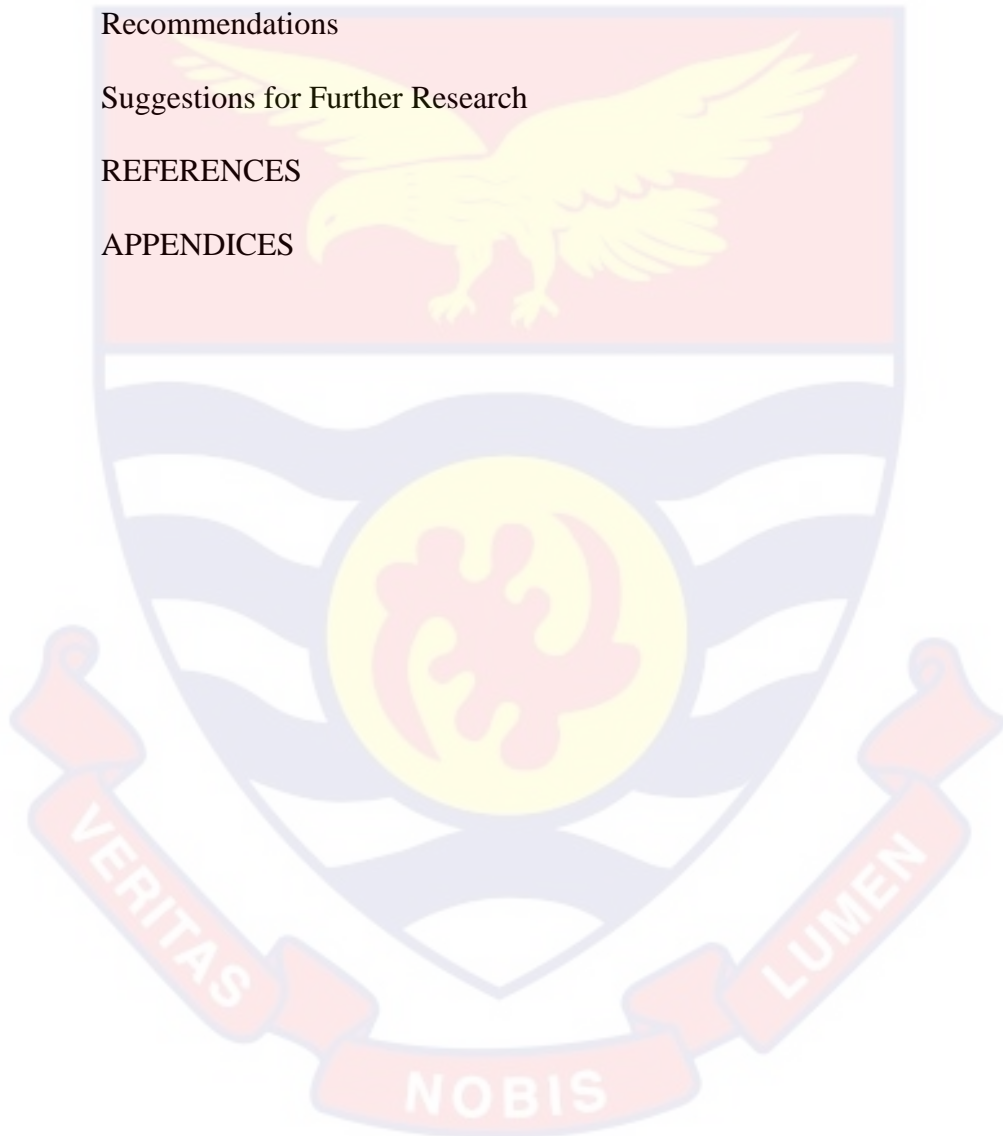
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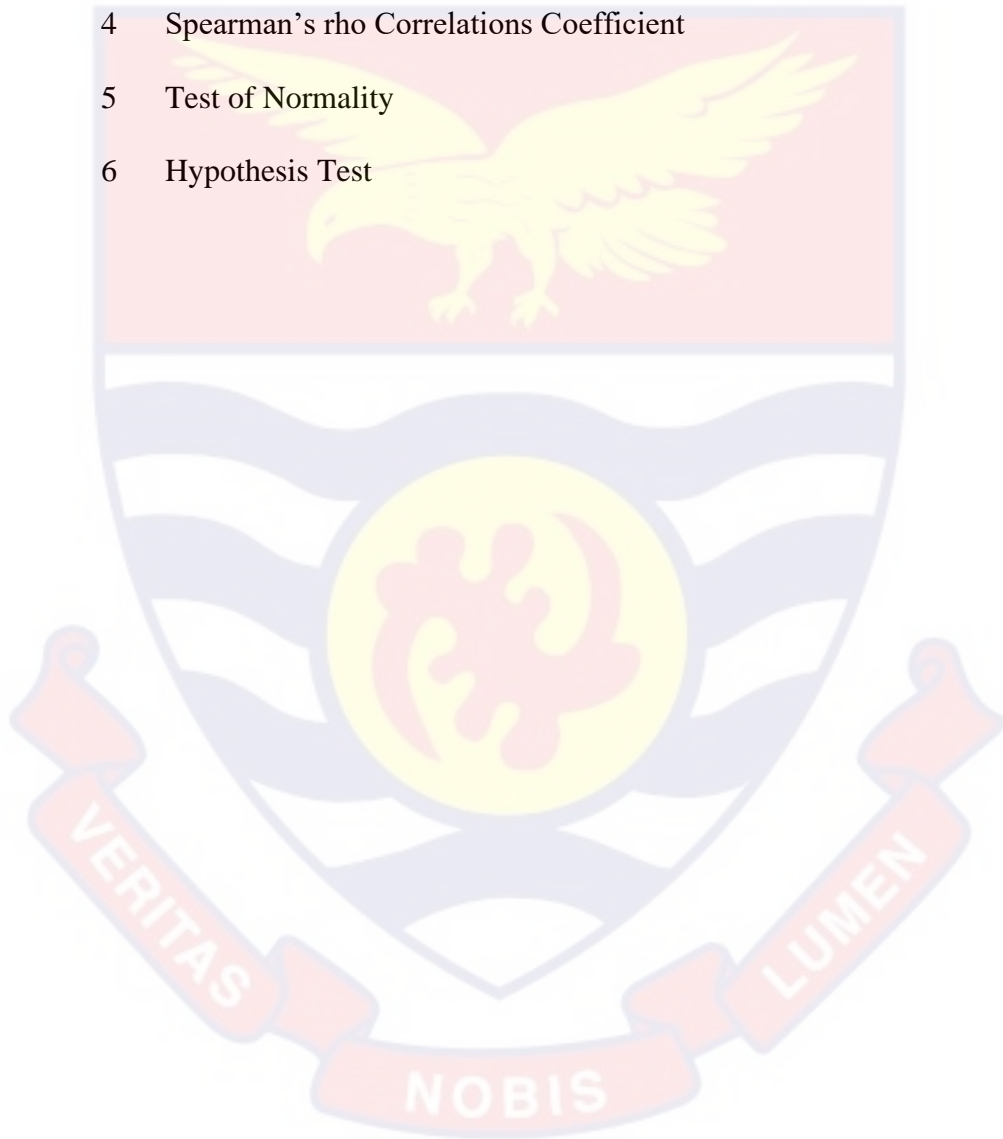
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## LIST OF ACRONYMS

CRS	Corporate Social Responsibility
DR	Debt ratio
ECO	Economic Disclosure Scores
ENV	Environmental Disclosure Scores
FP	Financial Performance
Fsize	Firm size
FSSD	Financial Services Sector Disclosure
GRI	Global Reporting Initiative
GSE	Ghana Stock Exchange
IASB	International Accounting Standards Board
LFI	Listed Financial Institution
ROA	Return on Assets
SOC	Social Disclosure Scores
SR	Sustainability Reporting

## CHAPTER ONE

### INTRODUCTION

Sustainability reporting (SR) practices present enough benefits to the People (Social), the Planet (Ecological or Environmental), and Profit (Economic) to organizations and countries. Although their disclosures are voluntary, but the practice demand resources which at times demotivate some firms not to even engage in them at all. Despite existing research on sustainability reporting practices globally and in Ghana, a significant knowledge gap remains regarding the impact of economic, social, and environmental disclosure scores on financial institutions' financial performance (FP), particularly when measured against Global Reporting Initiative (GRI), Financial Services Sector Disclosure (FSSD) guidelines. The existence of this knowledge gap enables this study to make a significant contribution to the field by examining the relationship between SR and FP of listed financial institutions in Ghana.

#### **Background to the Study**

The concept of sustainability development has been precisely defined as “Development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987) (as cited in Tackie, Agyenim-Boateng & Arthur, 2017). Hence, it is imperative that the current generation's use and consumption of global resources do not result in adverse impacts on the quality of life of future generations (Deegan, 2000). The discussion of organizational-level yearly reporting has included the question of sustainability. Many nations require both commercial and governmental entities to declare their financial performance (FP) on an annual

basis through a structured and thorough financial report or statement. External audits are often performed on these reports to assure their completeness, correctness, and financial accountability. Incorporating sustainability reporting (SR) into such reports is regarded as a forward-thinking approach in corporate communication, since it is regarded as an effective method of encouraging transparency and involvement within the business sector.

Sustainability reporting (SR), according to Wokeck (2019) is a strong instrument for firms to detect and reduce sustainability risks, strengthen governance procedures, enhance their reputation, and increase stakeholder confidence. While financial stability is important for organizations, it is not sufficient to assure long-term viability. In order to attain sustained prosperity, businesses must manage their natural and human resources in a sustainable manner, ensuring the continuation of their operations and contributing to the survival of future generations.

Companies should submit sustainability reports if they feel it would assist customers in making educated economic decisions, the International Accounting Standards Board (IASB) claims that, although they are not compelled to do so. In 1997, the Coalition for Environmentally Responsible Economies formed the GRI as a collaborative and voluntary effort to promote the use of sustainability reporting on a global scale. The aim was to create a consistent and commonly accepted structure for reporting on sustainability. In June 2000, the GRI launched the initial set of official guidelines for SR. These guidelines are now widely accepted worldwide as the leading method for SR and include indicators that help organizations assess and disclose their

economic, environmental, and social performance. This is often referred to as "triple bottom line" or "People, Planet, Profit" reporting (GRI, 2012).

Sustained efforts are being undertaken at the global and local levels to address the far-reaching consequences of sustainability challenges. As Elkington (1999) aptly notes, the triple bottom line framework is essential for understanding the complex interrelationships between social, economic, and environmental dimensions. This framework, also referred to as "Triple-Ps," encompasses three interconnected aspects: People (Social), representing the human and community impacts; Planet (Ecological or Environmental), signifying the natural resources and ecosystem effects; and Profit (Economic), indicating the financial and economic consequences. GRI (2002) states that, reporting on sustainability is crucial for strengthening the validity, reliability, and usefulness of SR and facilitating a more informed decision-making process.

Furthermore, GRI (2006) emphasizes that SR should be transparent, accountable, and inclusive to effectively address the triple bottom line. By adopting this framework and adhering to these principles, organizations and stakeholders can better understand and address the complex interrelationships between the three critical dimensions of sustainability.

An investigation of the relationship between financial performance in the banking industry and environmental openness was conducted recently in China by Xi et al. (2022). The researchers found that banks that disclose more environmental information tend to perform better financially, but this positive effect wears off over time. To maximize benefits, publicly traded banks are encouraged to actively disclose high-quality environmental information. The study used a manual content analysis approach to assess environmental



disclosure, which may be prone to some subjectivity. Additionally, financial performance was evaluated solely through Return on Assets, which may not provide a comprehensive picture of financial outcomes.

In order to examine the relationship between financial performance, and social and environmental accounting disclosures across companies listed on the Ghana Stock Exchange, KaoDui et al. (2019) carried out an extensive study. The researchers analyzed data from 2015 to 2017 and found a significant upward trend in the adoption of social and environmental accounting practices. Specifically, the companies demonstrated a notable increase in transparency and reporting, achieving an average score above 60% over the three-year period. This suggests that companies are increasingly recognizing the importance of social and environmental responsibility and are taking steps to integrate these considerations into their business practices. The study's short time frame, however, might not have adequately captured the long-term effects of these practices on financial performance. As a result, more investigation is required to determine the long-term effects of social and environmental accounting disclosures on business financial results.

Notwithstanding, Amoako et al. (2021) conducted research to investigate how sustainability reporting (SR) is done through formal and informal means in a developing country context. They found that mining companies and their subsidiaries in emerging economies should pay attention to informal channels in addition to formal methods of SR, in order to engage local communities and deal with sustainability challenges to avoid interruptions in their operations. However, it is well noted that the study was limited to mining companies and their subsidiaries.

The onus of disclosing SR to stakeholders lies in the bosom of the organization concerned. In view of this, some companies choose not to reveal anything on SR while others do. However, some stakeholders do not even know the importance of SR disclosures while others are in dire need of such reports. Turley-McIntyre, Marchl, and Stasuik (2016) suggested that to examine the issues related to SR and to identify obstacles in the financial services sector, it is crucial to consider its overall expenses, and more research is needed to determine its value for the organization and stakeholders.

However, Aduse (2017) argued that social and environmental reports can be highly beneficial in influencing stakeholder decisions. Meanwhile, the result reported by Amoako, Amoako, Tuffour, and Marfo (2021) contradicted with Aduse. They reported that majority of stakeholders in their host communities are not educated about official sustainability reports, and some not even interested in such reports.

In simple terms, performance measurement refers to regularly evaluating the outcome and result of programs, which provides reliable information about their effectiveness and efficiency. This measurement also determines the amount of information that the company provides to external users, rather than just the age or maturity of the program, (Dinca, Madaleno, Baba & Dinca, 2019).

The performance of a business is directly tied to the actions and decisions made by the individuals and teams involved (Krause, 2005). Uwuigbe and Egvide (2012) carried out an extensive study on a selection of Nigerian companies in an attempt to comprehend the effect of corporate social responsibility (CSR) on FP. Their study sought to determine whether businesses

that place a high priority on social and environmental responsibility typically had stronger financial results by investigating the association between the degree of CSR disclosure and FP. The study's findings revealed a strong positive relationship between CSR transparency and FP, indicating that companies that actively disclose their CSR efforts tend to achieve improved FP, including increased revenue, profitability, and shareholder value. This suggests that CSR is not only a moral imperative but also a strategic business driver that can contribute to long-term financial success.

Furthermore, the study sought to evaluate how company performance (Tobin's Q) was affected by sustainability report disclosures, which comprise elements pertaining to social, environmental, and economic aspects. Evana (2017) supported that a company's performance is positively impacted by economic disclosures. For measuring performance, Tobin's Q was used. According to the study, businesses that reveal more details about their financial performance typically have higher results the next period, which is reflected in their market value.

Financial institutions are organizations that facilitate various financial transactions. These transactions are of different types and involve money. Depository institutions, contractual institutions, and investment institutions are the three leading categories of financial organizations.

Depository institutions, including banks, building societies, credit unions, trust companies, and mortgage loan companies, play a crucial role in accepting deposits from individuals and businesses, providing a safe haven for their funds. Concurrently, they offer loans to those in need, facilitating access to credit and supporting economic growth. Contractual institutions, such as

insurance companies and pension fund managers, operate based on contractual agreements, providing specialized services like risk management and retirement planning. Investment institutions, including investment banks and underwriters, specialize in managing investments, facilitating capital flows, and supporting businesses in achieving their growth objectives. These institutions play a vital role in maintaining financial stability, managing risk, and promoting economic development.

The way financial institutions disclose their sustainability reports and the factors that influence their financial decisions are not well understood. Additionally, it is necessary to examine the manner in which sustainability reports are created and presented and its consequences on the performance of financial institutions and their stakeholders. The financial literature has shown that there is a link between sustainability reports and wealth maximization, (Osunsusi, Adegbe & Anaekenwa, 2024).

The financial sector in Ghana is characterized by a diverse range of institutions, each with its own distinct operational dynamics and environmental influences. Consequently, a comprehensive and specialized study is essential to examine the specific impact of SR on the performance of these institutions. This research would provide valuable insights into the ways in which SR affects financial institutions in Ghana, taking into account the country's unique cultural, economic, and regulatory context. By exploring this relationship, the study can inform strategies for enhancing the performance and sustainability of Ghana's financial institutions.

The main market place in Ghana where securities are bought and sold, including stocks issued by corporations and government bonds is the Ghana

Stock Exchange (GSE). As of April 2023, there were a total of 38 companies that have been listed on the GSE.

### **Statement of the Problem**

Companies are encouraged to disclose the effect of their economic, social, and environmental activities to benefit stakeholders and strengthen relationships with employees and local communities. To ensure systematic measurement and compliance with sustainable reporting (SR), the GRI issued G4 as a general guideline and specifically GRI G4, FSSD for the financial services sector.

The 2020 KPMG survey on sustainability reporting revealed that 80% of the top 100 revenue-generating companies across 52 countries now disclose their sustainability practices, up from 64% in 2011. In Ghana, sustainability reporting is not mandatory. However, the government invests significant funds to address the negative impact on the environment and on the economy as a result of the company's engagement in these harmful activities (Minerals Commission, 2019).

As could be found in (KaoDui, Muyun & Mandella 2019; Masud, Bae & Kim, 2017; Xi, Dai, & Liu, 2022). These studies focused only on one dimension of sustainability reporting. Such as environment disclosure, social disclosure or both. Additionally, there is a dearth of studies on the use of Financial Services Sector Disclosure guidelines by the GRI as an indicator to measure the SR practices by the financial services sector in Ghana. Hence, the current study filling this gap.

Even though many studies have been conducted globally and in Ghana regarding Sustainability Reporting (SR) practices, there is still lack of research

that examines the impact of economic disclosure score, social disclosure scores, and environmental disclosure scores on the performance of financial institutions, using GR G4, FSSD guidelines as a measure of SR. This knowledge gap presents an opportunity for this current study to add to the literature by exploring the effect of SR on Financial Performance (FP) of LFI's in Ghana.

The study aims to fill this gap and provide valuable insights into the topic of SR.

### **Purpose of the Study**

The main purpose of this study was to determine the effect of Sustainability Reporting on the Financial Performance of Listed Financial Institutions in Ghana.

### **Research Objectives**

The following research objectives were guided by the study to determine the effect of;

1. economic disclosure scores on the financial performance of listed financial institutions in Ghana.
2. social disclosure scores on the financial performance of listed financial institutions in Ghana.
3. environmental disclosure scores on the financial performance of listed financial institutions in Ghana.

### **Research Hypotheses**

The study aimed to achieve the specific research objectives mentioned earlier. To achieve this, the following questions were tested empirically:

1. H1: There is a significant effect of economic disclosure scores on the financial performance of listed financial institutions in Ghana.

2. H2: There is a significant effect of environmental disclosure scores on the financial performance of listed financial institutions in Ghana.
3. H3: There is a significant effect of social disclosure scores on the financial performance of listed financial institutions in Ghana.

### **Significance of the Study**

This study will be useful, and helps to understand how reporting on economic, social, and environmental factors affects the financial decisions of financial institutions in Ghana. By filling this gap in our knowledge, researchers can gain a better understanding of how these factors impact the financial institutions primary business.

The study is expected to provide financial managers with practical knowledge on the possible issues that may arise in financing decisions and companies' performance regarding sustainability reporting. Furthermore, it can serve as a foundation for policymakers to establish standards for sustainability reporting practices. Additionally, other researchers interested in sustainability reporting and financial performance can use the findings as a reference. Ultimately, the study aims to provide financial managers and the government with practical insights into the potential consequences of failing to disclose sustainability reports.

### **Delimitations**

The present study focused exclusively on listed financial institutions on the Ghana Stock Exchange. It analyzed the financial reports of these institutions for a 10-year period, spanning from 2012 to 2021. The study employed the Global Reporting Initiative's Financial Services Sector Disclosure guidelines as a benchmark for assessing sustainability reporting quality. The variables

examined in the study included return on assets, economic disclosure scores, environmental disclosure scores, social disclosure scores, firm size, and debt ratio. Therefore, this study is designed to report exclusively with these variables. The reason for the listed financial institutions was because of easily accessible nature of their annual reports. The findings and suggestions may not be suitable for other companies within the country.

### **Limitations**

This study has some important limitations that need to be considered when interpreting the findings. One limitation is the small sample size of only 12 listed financial institutions included in the study, which may have affected the strength of the findings, although there are over 100 financial institutions licensed in Ghana. This study can still serve as a starting point for further research that includes more financial institutions. Another limitation is that the study did not test for bidirectionality or causality between SR and FP, which could have provided more insights. Additionally, measuring key variables and identifying SR practices may have been difficult which could potentially affect the accuracy of the results. There were also limitations related to the availability of secondary data, as not many studies have been conducted on this topic in Ghana.

Future studies are encouraged to mitigate these limitations by incorporating both listed and non-listed financial institutions in Ghana by testing the causality between SR and FP and carefully measuring the key variables. Additionally, primary data could be considered to enrich the availability of data on the topic. Despite these limitations, the findings of this study are still reliable and replicable for decision-making purposes.



## **Organization of the Study**

This study comprises five main chapters. Chapter One introduces the background, problem statement, study objectives, research hypotheses, significance, and scope of the study, as well as its limitations. Chapter Two provides a comprehensive literature review, encompassing theoretical frameworks, empirical and conceptual reviews, and model specification, organized around the primary variables of interest. Chapter Three outlines the research methodology, including research design, target population, sample size, and data collection instruments. In Chapter Four, the collected data is analyzed, presented, and discussed. Finally, Chapter Five summarizes the study's conclusions, recommendations, and suggestions for future research.

## **Chapter Summary**

The chapter provided a comprehensive introduction to the study, covering the context and background of sustainability reporting in the financial services sector. It also clearly defined the research problem, purpose, objectives, and hypotheses, as well as the significance and scope of the study. Additionally, the chapter acknowledged the delimitations and limitations of the study and provided an overview of the study's structure and organization, including a summary of the key content in each chapter.

## CHAPTER TWO

### LITERATURE REVIEW

#### **Introduction**

This chapter provides a detailed discussion of the related literature to sustainability reporting (SR) practices and the financial performance (FP) of financial institutions. The review of the literature is segmented into two sections: theoretical and empirical review. The theoretical part establishes the framework of the study and includes all the relevant theories upon which the study is based. The empirical part discusses the studies that have been done on the variables under study. The chapter reviews key concepts and explains how study variables relate to each other through a conceptual framework.

#### **Theoretical Review**

This study is grounded on the concepts of legitimacy theory, stakeholder theory, and institutional theory, which are rooted in the broader framework of political economy theory. Political economy “refers to the social, political, and economic context in which people live their lives” (Gray, Owen & Adams 1996, p. 47) (as cited in Tackie, 2020).

#### **Legitimacy theory**

Legitimacy theory is founded on the idea of a "social contract," where financial institutions are expected to follow the rules and norms of the society in which they operate. Therefore, financial institutions must demonstrate that they support and comply with societal norms, beliefs, and culture to be successful. Guthrie and Parker (1989) argued that, consistent with legitimacy theory, companies will enhance their transparency by disclosing more information during periods of significant social and environmental change.

Legitimacy is vital to all companies because it gives them the authority to function (Deegan, 2002).

According to Deegan (2000), legitimacy theory suggests that companies constantly seek to validate their operations by adhering to societal norms and regulations. By doing so, they aim to prove their business legitimacy and legality. The premise of this theory is that, there is a mutual agreement between companies and their social context, where society expects certain standards of performance.

To be considered socially responsible, companies must meet expectations and respect the rights of the broader community, including social and environmental rights. This requires companies to voluntarily disclose reports that demonstrate their alignment with stakeholder expectations, ultimately leading to the development of sustainability reporting that showcases their commitment to social and environmental responsibility, (Agustina, Jati & Suryandari, 2020).

### **Stakeholder theory**

Freeman and Reed (1983) provided a foundational definition of stakeholders, encompassing individuals or groups that possess the power to shape or are significantly impacted by an organization's purpose, goals, and outcomes. This definition highlights the interconnectedness of organizations with their environment and the need for consideration of diverse stakeholder interests. Figueroa, Orihuela, and Califucara (2010) categorized stakeholders into two types: primary and secondary. Primary stakeholders are essential to the organization's existence, including shareholders, management, employees, customers, and government. In contrast, secondary stakeholders are those who

are impacted by the organization's actions but do not have a direct relationship or transaction with it, and are not crucial to its survival.

On the other hand, Rahmanti (2012), argued that a company's stakeholders encompass a broad range of parties, including the immediate community, workers, investors, owners, suppliers, the government and future generations. Stakeholder theory, in essence, identifies the parties to whom a company is accountable to.

To foster positive relationships with these stakeholders, companies must address their diverse needs and desires. One strategy for achieving this is by publishing a sustainability report, which provides a holistic view of a company's performance, integrating economic, environmental, and social metrics to present a complete picture of its overall impact and progress. As Adhima (2013) asserted, meeting these information needs can help create and nurture a network of supportive and productive relationships between the company and its diverse stakeholders, including customers, employees, investors, and the wider community. By disclosing sustainability reports, financial institutions can satisfy the varied information requirements of their stakeholders, ultimately leading to more harmonious relationships.

In support of the above, Freeman 1994 opined that information that a company needs to disclose must be reported to establish and maintain a resilient, trust-based relationship with its stakeholders, ensuring a balanced and enduring connection that benefits both the company and its stakeholders. This theory suggests that for a company to be successful, it's not enough to satisfy the demands of its shareholders. The company must also consider the interests of

other groups or entities that are influenced by its actions or have an impact on its operations, (Freeman, 1984; Gray, 1995).

### **Institutional theory**

The institutional theory suggests that organizations often adopt similar structures and behaviours in order to appear legitimate in their environment, (DiMaggio & Powell, 1983). This is because organizations may receive benefits such as increased legitimacy, resources, and ability to survive when they conform to these norms (Scott 1987, p. 498) (as cited in Tackie, 2020).

The institutional theory enriches the understanding of organizational dynamics and stakeholder interactions by complementing legitimacy theory and stakeholder theory, and accounting for the impact of broader institutional forces. It highlights the connection between organizational practices and societal values. Brammer, Jackson, and Malten (2012) explained that institutional theory concerns how organizations make decisions by observing competitive market issues.

According to institutional theory, organizations adopt specific practices in response to institutional pressures. In the context of sustainability reporting, financial institutions are driven by three types of pressures: normative (social expectations), mimetic (imitation of peers), and coercive (regulatory requirements).

While some institutions may mimic the reporting practices of others, the majority adhere to standardized guidelines, including frameworks like the Global Reporting Initiative's (GRI) standards, which prescribes specific metrics and disclosures for sustainability reporting, (Tackie, 2019). This conformity to

established standards enables institutions to demonstrate their commitment to sustainability responsibility and maintain legitimacy in their industry.

## **Conceptual Review**

### **Sustainability reporting concept**

The United Nations' Brundtland Report, published in the late 1980s, marked the introduction of the concept of sustainable development, defining it as “development that fulfills the present's needs while ensuring that future generations can meet their own needs”. Although it's a disputed concept, it can be useful in analyzing complex issues. The concept is closely linked to environmental innovation, which asserts that environmental concerns and the expansion or progress of an economy can coexist harmoniously. Sustainability recognizes that economic, social, and environmental factors are interrelated, and it takes a long-term, future-oriented approach to these issues with a focus on the well-being of future generations.

The issue of sustainability has also been incorporated into the discussion about the annual reports or sustainability reports that organizations are required to publish willingly in most countries. These reports contain financial information presented in an organized way, and are usually audited by an external auditor to ensure accuracy and completeness.

Initially, sustainability reports were mainly focused on environmental performance and were known as single-issue reports. This was due to the fact that environmental concerns were highly prioritized and that comprehending the multidimensional concept of sustainability was challenging. However, a shift has occurred since the dawn of the 21st century, with a growing number of comprehensive sustainability reports being published, whereas the percentage

of reports focusing solely on environmental issues has declined. Despite this trend, sustainability reporting practices still tend to concentrate mainly on environmental issues and eco-efficiency in many cases.

The idea of the "triple bottom line" emerged to support the idea of reporting on environmental, social, and economic performance as a whole. This concept suggested that economic, environmental, and social factors should be balanced and treated as equally important. Simply focusing on financial stability is not enough for companies to be sustainable, as managing resources sustainably is also crucial for long-term viability, ensuring that future generations can thrive.

Sustainability reporting, also called non-financial reporting, has different interpretations. Giordino and Crocco (2022) stated that sustainability reporting enables companies to transparently share their environmental and social impact, promoting accountability and sustainable practices. Hazaea, Zhu, Khatib, Bazhair and Elamer (2021) believed that sustainability reporting not only enhances an organization's reputation but also adds value to its planning, structure, monitoring, and accountability. Snezhko and Coskum (2019) explained sustainability reporting as the publication of data and insights that extend beyond traditional financial metrics by an organization, showcasing its CSR actions and their outcomes across the three dimensions of sustainability: economic growth, social development, and environmental protection that affect a community. Their study showed a positive trend, with sustainability reports increasingly covering compliance information in recent years.

A sustainability report, in its most basic form, is a document published by a business or organisation that discusses the effects of its operations on the

environment, society, and the economy. The GRI developed a form of sustainability reporting called the G4 in 2013 to ensure that companies of all sizes and sectors around the world are transparent about their business activities. The goal is to increase harmonization between companies and their stakeholders, such as shareholders, management, employees, governments, NGOs, and society. Sustainability reports can also help investors make informed decisions by providing them with technical and fundamental analysis.

Sustainability reporting (SR) can be found in various forms. Some organizations produce stand-alone sustainability reports that are published on annual or biannual basis, which are distinct from their mandatory financial disclosures. Gray and Herremans (2012) asserted that sustainability reports are voluntarily produced by organizations. In addition, governments and stock exchanges now mandate the incorporation of sustainability disclosures, including environmental responsibilities, employee demographics, and corporate governance structures, into their current financial reports, (Thistlethwaite & Menzies, 2016). Another way in which sustainability reporting can occur is through a series of reports that are available online. While organizations often publish environmental or social information in separate reports, there are also methods that integrate this information with the annual financial report.

In this present study, the researcher defines SR as a “periodic voluntary collation and communication of an organization’s economic, social and environmental impact on its activities to the society withing which it operates and to stakeholders to make useful decisions”. After collating these reports, the organization is at liberty to present this information in their annual reports or in



separate reports focused on sustainability, published in the annual reports or on the organization's website to stakeholders.

### **Financial sector business lines**

According to the GRI G4, FSSD guidelines (2013, p. 7), the financial sector is grouped into four categories. They are “retail banking, commercial and corporate banking, asset management, and insurance, otherwise referred to as the core business lines”.

#### **Retail banking**

Under retail banking, financial services in the form of banking are provided to individuals and small businesses, catering to their diverse needs. The World Bank (2020) asserted that retail banking is the provision of financial services by a bank to individual consumers and small businesses. The services provided include everyday banking necessities for regular people, such as 'payment services, account management, and lending (European Banking Federation, 2020).

Additionally, retail banking serves affluent clients with specialized services like wealth and portfolio management, enabling them to achieve their financial goals. According to Deloitte (2020), wealth management is about more than just managing wealth – it's about managing life's goals and aspirations. Furthermore, retail banking facilitates everyday transactions, payroll handling, and small loans, as well as provides foreign exchange, derivatives, and other financial products for individuals in their business pursuits, thereby supporting their financial well-being and business growth. The International Monetary Fund (2019) highlighted that retail banking plays a vital role in supporting economic activity and financial inclusion in a society.

## **Commercial and corporate banking**

The financial industry comprises two primary subsectors: corporate and commercial banking. According to Bank of Ghana (2020), commercial banking involves providing financial assistance and services to a diverse range of clients, including individuals, SMEs, and non-corporate entities. Conversely, corporate banking focuses on delivering financial solutions to large corporations and institutional clients, encompassing investment banking, treasury management, and foreign exchange services. Deloitte (2020), posited that corporate banking serves the complex financial needs of large corporations, including cash management, trade finance, and risk management.

The International Monetary Fund (2019) also highlighted the distinction, stating that, corporate banking typically involves providing financial services to large firms and institutional investors, including underwriting, mergers and acquisitions, and securities trading.

### **Asset management**

Asset management provides management services for pools of money for other people, investing in various assets such as stocks, bonds, cash, property, international stocks and bonds, and alternative investments like private equity, venture capital, and hedge funds. As opined by Bank of Ghana (2020), asset management entails the expert oversight and administration of investment portfolios for the benefit of individuals, corporations, and institutional clients. This encompasses range of investment strategies, from conservative to aggressive, tailored to meet specific client objectives.

According to World Bank (2020), asset management can help investors achieve their financial goals by providing access to a diversified portfolio of

assets' investment banking activities, such as trading in shares and derivatives, as well as fixed income activities like trading bonds, loans, loan portfolios, and credit derivatives, are also integral to asset management.

As Deloitte (2020) highlighted, investment banking services include advisory, underwriting, and trading activities, helping clients raise capital, manage risk, and achieve strategic objectives. The International Monetary Fund (2019) also emphasized the importance of asset management, stating effective asset management can contribute to financial stability by facilitating the efficient allocation of resources.

### **Insurance**

The insurance industry acts as a financial guardian, shielding individuals and businesses from unexpected events and losses. As the Insurance Commission of Ghana (2020) posited, the insurance industry provides a range of products and services, including life insurance, non-life insurance, and pension services, to mitigate risks and provide financial security.

Pension and life insurance services are essential components of this industry, offering individuals and company employees financial support in times of need. According to World Bank (2020), life insurance and pensions help individuals manage risk and plan for the future, providing a safety net for loved ones and a source of income in retirement.

Insurance services for individuals and businesses, including property, liability, and health insurance, are also critical in managing risk and ensuring financial stability. As Deloitte (2020) highlighted, insurance companies provide essential risk management solutions, helping individuals and businesses mitigate potential losses and protect their assets. Re-insurance services, which

involve insurers transferring risk to other insurers, further enhance the industry's ability to manage risk.

The International Monetary Fund (2019) emphasized the importance of a well-functioning insurance industry, stating that a sound insurance sector can contribute to financial stability and economic growth.

### **Sustainability reporting in the financial service sector**

The financial service sector began to integrate SR into its operations in the late 1980's. According to Jeucken and Bouma (1999) (as cited in Babiak & Trendafilova, 2011), the first activity focused on was internal environmental management, which resulted in reduced emissions, lower environmental resource usage, and improved status. Banks have also integrated environmental considerations into their financial activities, including lending, investments, asset management, and project finance, as outlined in the GRI G4, FSSD guidelines (2013, p. 7). This approach was first noted by Schmidheiny and Zorraquin (1996) and later supported by Scholtens (2008). The potential financial risk posed by credit and investment portfolios can be significantly impacted by environmental risks, including those that arise from climate change.

According to a study by Turley-McIntyre et al. (2016), most people surveyed (82%) prefer reports that integrate financial and sustainability information. However, only 33% of banks and 66% of insurance companies have such reports. According to Islam, Azizul, Jain, Ameeta and Dianne (2016) banks are showing a positive response to the adoption of the GRI framework as there is an increase in sustainability disclosures.

De la Cuesta-González et al. (2006) investigated the CSR of Spanish financial institutions, and Branco and Rodrigues (2008) looked at the disclosures of CSR made by Portuguese banks. Branco and Rodrigues (2008) claimed that firms in the banking and financial services sectors that have an influence on the environment have not placed enough emphasis on their sustainability reporting.

Financial institutions have been slow to think about how their operations may affect society and the environment, as asserted by (Jeucken & Bouma, 1999). While banks have made some efforts to disclose environmental information related to green banking and renewable energy, they have lagged behind in addressing waste management and environmental recognition, (Masud, Bae & Kim, 2017). However, a study by KaoDui et al. (2019) found that companies in Ghana, including financial institutions, are increasingly adopting Social and Environmental Accounting Reporting (SEAR) practices, which positively impacts their performance.

### **Ghana sustainable banking principles**

Ghana's central bank and the International Finance Corporation, began working on a national platform in April 2015 to promote sustainable banking. To further this effort, they established the Sustainable Banking Committee in November 2015. By 2017, the Committee had drafted a sector guidance notes for sustainable banking principles for the first time in the history of Ghana. These were finalized and officially launched as the Ghana Sustainable Banking Principles (SBPs) by the Central Bank in November 2019. These principles provide a framework for banks to manage environmental and social risks effectively.

The Ghanaian Sustainable Banking Principles (SBPs) consist of seven fundamental principles that banks must adhere responsibly to manage their environmental and social risk. The first principle is Environmental and Social Risk Management (ESRM), which aims to identify and manage risks associated with environmental and social issues, followed by Internal Environment Social and Governance (ESG) in banks operations, which focuses on promoting good corporate practices within the bank. The third principle is Corporate Governance and Ethical Standards, which emphasizes on ethical and transparent decision-making processes. The fourth principle is Gender Equality, which highlights the importance of promoting gender equality within the banks and the communities they serve. The fifth principle is Financial Inclusion, which aims to increase access to financial services for underserved communities. The sixth principle is Resource efficiency, Sustainable Production and Consumption, which focuses on promoting sustainable production and consumption practices. And the final principle been Reporting towards five sectors, which are “Agriculture & Forestry, Construction & Real Estate, Manufacturing, Oil & Gas and Mining, and Power & Energy”. These sectors represent a considerable proportion of the banks' portfolio exposure and are prone to environmental and social standards. In 2020, twenty-four (24) banks accepted to adhere to the Sustainable Banking Principles.

### **Sustainability reporting framework**

Sustainability reporting has become more widespread, leading to the development of various reporting frameworks. Several sustainability reporting frameworks are widely recognized and endorsed by esteemed organizations, including the Global Reporting Initiative (GRI), International Integrated

Reporting Council (IIRC), Climate Disclosure Standards Board (CDSB), Carbon Disclosure Project (CDP), Sustainability Accounting Standards Board (SASB), and others.

These frameworks provide guidelines for organizations to report their environmental, social, and governance (ESG) performance. For the purpose of this study, the researcher adopted the GRI as a prominent framework for measuring the SR practices. The GRI framework is a widely used standard for SR, providing a comprehensive set of metrics and indicators for reporting ESG performance.

### **The Global Reporting Initiative**

The Global Reporting Initiative (GRI), founded in 1997, is a not-for-profit making organization that plays a pioneering role in developing guidelines for sustainability reporting (SR). As a leading standard-setter, GRI has been instrumental in shaping the global framework for organizations to disclose their environmental, social, and governance (ESG) impacts. The GRI's aim is to make SR a common practice by offering guidance and assistance to companies. The GRI currently provides the most commonly used SR framework.

The GRI's reporting framework is designed for both private sector businesses and public sector agencies by providing flexibility to organizations so that they can align their reporting with their strategic goals and sustainability impacts.

The GRI also produces specific sector standards alongside its main reporting standard. These sector standards include Oil and Gas; Coal; Agriculture; Aquaculture and Fishing; Mining; Financial Services; Textiles; and Apparel. As a result of the objectives of the current study, the Financial Services

Sector which is dubbed GRI G4, Financial Services Sector Disclosure (FSSD) guidelines was employed to measure the sustainability reporting of the firms under studied. The GRI G4, FSSD guidelines is a prominent framework for measuring sustainability reporting practices of financial institutions. The GRI G4, FSSD guidelines, on the other hand, focus specifically on the financial sector, providing guidance on reporting financial stability and sustainability performance.

In 2013, the GRI released G4 as a sustainability reporting measure, which has been divided into three categories, namely: Economic, Social, and Environmental dimensions.

The Economic dimension of sustainability reporting examines an organization's influence on the financial prosperity of its stakeholders, as well as its impact on local, national, and global economic systems. This category focuses on how the organization allocates its financial resources among stakeholders and contributes to the broader economic well-being of society.

The Environmental aspect of sustainability reporting by GRI G4, refers to how an organization activity affects the planet Earth, including things like land, water, air, and ecosystems. The Environmental category includes information about the organization's use of resources like energy and water, as well as any pollution or waste generated. It also covers the impact on biodiversity, transportation, and any environmental costs or regulations the organization must comply with.

The Social dimension of sustainability reporting encompasses an organization's influence on the social fabric of the communities it operates in. This includes:



- Decent work and labour practices: ensuring fair treatment, safe working conditions, and equal opportunities for employees.
- Human rights: respecting and protecting the fundamental rights of all individuals, including employees, customers, and domestic communities.
- Society: contributing to the well-being and development of the communities, through initiatives such as community engagement, philanthropy, and volunteerism.
- Product responsibility: ensuring that products and services are safe, reliable, and accessible, and that their lifecycle impacts are minimized

By reporting on these social aspects, organizations demonstrate their commitment to being a responsible and positive force in society.

### **Sustainability reporting and performance of firms**

Why do firms engage in sustainability reporting (SR) to demonstrate their accountability to stakeholders regarding economic, environmental and social factors? To understand this, numerous global research studies have been carried out to investigate the relationship between SR practices and firm performance. These studies, including Attah-Botchwey, Soku, and Awadzie (2022), Buallay, Hamdan, and Barone (2020), and Andania and Yadnya (2020), have consistently shown that transparency in economic and social aspects of sustainability has a significant impact on a firm's overall performance. The findings indicated that disclosing comprehensive sustainability information can yield improve financial returns, enhanced reputation, and better risk management, ultimately driving business success. By examining the influence of SR practices on business performance, these studies provided valuable

insights for companies focusing on incorporating sustainability into their business strategy. Furthermore, studies conducted by Wasara and Ganda (2019) and Evana (2017) revealed that disclosing a company's impact on the environment does not have any effect on the company's performance.

A study by, Nobanee and Ellili (2017) examined the relationship between sustainability disclosures and bank performance in the United Arab Emirates (UAE) financial markets. Using panel data, they investigated the impact of economic, environmental, and social disclosures on the financial performance of listed banks. Contrary to expectations, their analysis revealed that sustainability disclosures did not have a significant effect on bank performance in the UAE. This finding suggests that, in this context, sustainability reporting may not be a key driver of financial success, and together with other dynamics could exert a more profound influence on determining bank performance.

### **Firm's performance**

Measuring performance can be ascertained through qualitative or quantitative means. In view of this, Sidhoum and Serra (2017) believed that firm performance should be measured in both quantitative and qualitative ways, reflecting how effective and efficient a company is in reaching its goals. According to Dinca et al. (2019), the degree of information that a company provides is affected by its performance.

Various studies in the extant literature have utilized a range of financial metrics to evaluate the impact of sustainability reporting (SR) on financial performance (FP). These metrics include Return on Assets (ROA), Return on Equity (ROE), Return on Capital Employed, Tobin's Q, Earnings Per Share, Net

Profit Margin, and Dividend Per Share, among others. For instance, Evana (2017) and Attah-Botchwey et al. (2022) leveraged Tobin's Q to assess the relationship between SR and FP. Meanwhile, Acar & Temiz (2019), Xi et al. (2022), and KaoDui et al. (2019) employed ROA as a key performance indicator. Notably, Buallay et al. (2020) employed a multi-faceted approach, using ROA, ROE, and Tobin's Q to compare the impact of sustainability reporting on manufacturing and banking sectors. Their findings suggest that banks can significantly enhance their performance by prioritizing sustainability reporting.

In this current study, return on assets (ROA) was used as the performance measure, calculated as the ratio of profit before tax to total assets. This was because profit before tax was deemed to be a more accurate indicator of the company's profitability than profit after tax.

#### **Firms' size**

In determining the impact of firms' characteristics on the sustainability reporting (SR) practices of Banks in Nigerian, Michael and Oluseye (2014) argued that size of a firm has no effect on its sustainability reporting disclosures. However, Kiswanto, Apriyani, Yanto and Hajawiyah (2020) argued in a related study that, organizations green commitment is affected by its size. Isa (2014) asserted that big companies have a habit of disclosing less sustainable information compared to smaller ones. Weber (2014) reported that sustainability performance has a link with size of banks. And, consequently suggested that, regulatory bodies should consider creation of implementation guidelines for banks of different sizes, because resources available to banks

considered as small in size are inadequate to invest in sustainability practices and as a result may require enough support to succeed.

Therefore, to ensure that sustainability regulations are effectively implemented in the financial sector, the size and capacity of financial institutions must be taken into account, (Weber, 2017). In this present study,

Firm size (Fsize) was used to indicate the total assets of the company at a specific point in time, usually measured in years.

#### **Firms' debt ratio**

The Debt ratio (DR) also known as leverage shows how much of a company's assets are funded through debt. There is no set rule for the maximum safe DR, but as a general guideline, 50% is considered a safe limit. However, many companies successfully operate with a higher DR than 50%. Having too much DR can impact a company's growth and development. For instance, Gande and Puri (2004) discovered that higher DR were linked to higher returns on assets in banks. This suggests that financial institutions that rely on more DR financing can generate greater profits, in the foreseeable future.

However, some studies have found conflicting results. For instance, a study by Chen and Wong (2004) discovered that the association between DR and ROA was negative for banks in Hong Kong. The researcher in this current study chose DR along with other moderating variables because of its wide comprehensibility by most users of annual reports released by the listed financial institutions.

## **Empirical Review**

This section reviews different and related studies that have been carried out on sustainability reporting (SR) practices by firms in the financial institutions at the international and national levels.

### **Empirical studies on sustainability reporting disclosure**

In the existing literature, various scholars have investigated the topic under examination. Turley-McIntyre et al. (2016) conducted a study on sustainability reporting (SR) in Canadian financial institutions, employing a survey with a blend of select-response items and open-ended items. The survey was administered to a diverse range of Canadian financial institutions, encompassing banks, credit unions, Crown corporations, and insurance companies, over a period of two weeks, from March 8 to March 31, 2014.

The study found that, majority of Canadian financial institutions believe the benefits of Sustainability Reporting (SR) outweigh its costs, with 86% in support. However, there are challenges in measuring SR's impact, with 73% of respondents finding it difficult to quantify its costs and benefits. Despite this, there is a strong desire for standardized SR metrics, with 64% supporting their development and 50% wanting an accounting standards-setting body to adopt them. Although 82% of respondents favour Integrated Reporting, its adoption is limited, with only 33% of banks and 66% of insurance companies having implemented it.

The study identified six key areas to improve reporting in the financial sector and individual organizations. These areas include developing a sustainability strategy, creating stakeholder panels, and transitioning to integrated reporting. The study, which focused on Canadian financial

institutions, aimed to enhance reporting practices through these recommendations.

In the extant literature, Andania and Yadnya (2020) conducted a study to examine sustainability reporting (SR) and financial performance (FP) of publicly-traded banks on the Indonesia Stock Exchange (IDX) from 2013 to 2016. The Global Reporting Initiative (GRI G4) Index was used in the study to assess SR standards, while return on assets (ROA) was used to quantify FP. The study results indicated that the transparency of economic and social information significantly influenced ROA, suggesting that investors and stakeholders value this information when making decisions. However, surprisingly, the environmental dimensions of disclosure did not have a significant impact on ROA, implying that environmental considerations may not be a primary driver of FP in this context. This suggests that the banks listed on the IDX give more importance to the disclosure of economic and social dimensions in their sustainability reports than environmental dimensions. The study argues that companies can have better FP by conducting sustainability reporting disclosure activities, meanwhile the findings were limited to banks listed on the IDX.

Moreover, Pobbi, Anaman and Quarm (2020) took a study to examine the conformity of sustainability reporting practices and trends in their disclosure practices among companies in Ghana. They focused on three major mining companies, and used qualitative research methods to analyse their data. Furthermore, they carried out the study in-person interviews backed by legitimacy theory and stakeholder theory. The results showed that while there has been an increase in environmental disclosures over time, the mining companies' environmental disclosure practices remained subpar, falling short of

expected standards, as reflected in their overall performance ratings. The study focused on mining companies at the expense of non-environmental sensitive firms.

Attah-Botchwey et. al (2022) investigated African banks performance and sustainability reporting (SR). They collected secondary data from audited financial statements of listed banks in South Africa, Ghana and Nigeria from 2010 to 2020. The sample size of the study was 20. SR was analyzed using Global Reporting Initiative's framework. The study found a significant positive effect between Tobin's Q, return on assets (ROA) and the economic, social, and governance aspects of the banks' SR practices. Additionally, environmental sustainability reporting was found to have a positive effect on ROA, but not on Tobin's Q. The study suggests that, in order for companies to fully disclose sustainability reporting practices, social media handles such as YouTube, Twitter, Instagram and Facebook can be used alongside the traditional methods like the annual reports. However, the study only focused on banks, excluding other financial institutions like insurance companies. Hence, the current study mitigating this limitation by incorporating insurance companies into the financial institution.

### **Conceptual Framework**

The conceptual framework is a comprehensive structure comprising key concepts and principles derived from multiple academic fields, used to organize and guide presentations. As illustrated in Figure 1.0, this framework visualizes the relationships between independent and dependent variables, as well as control variables. Specifically, this study's independent variables are Economic Disclosure Scores (ECO), Environmental Disclosure Scores (ENV), and Social

Disclosure Scores (SOC), while the dependent variable is Return on Assets (ROA), a measure of financial institution performance. Firm size and Debt ratio serve as control variables.

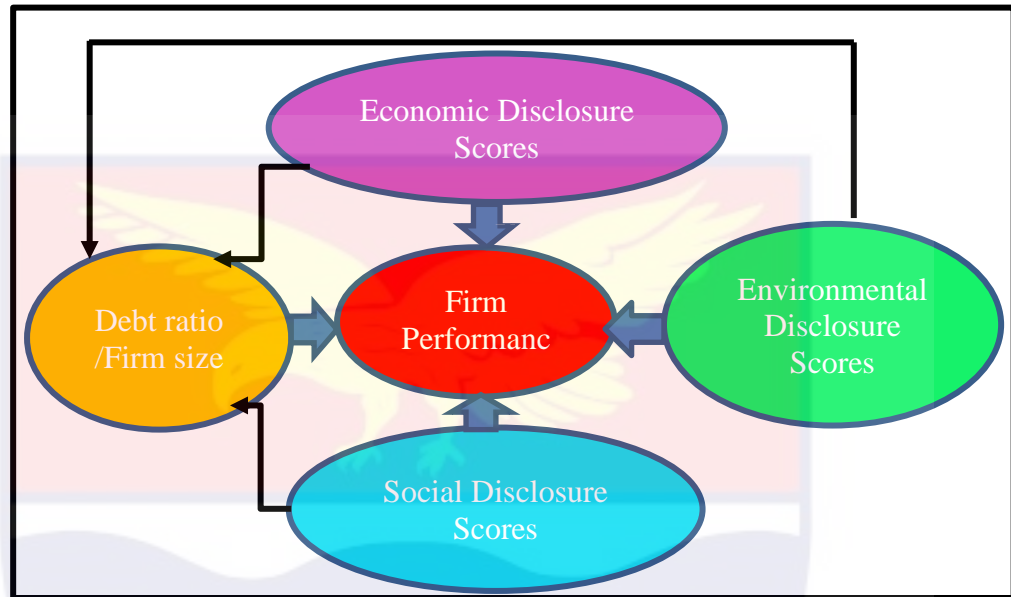


Figure 1: The Conceptual Framework

Source: Researcher's own construct (2023)

### Chapter Summary

This chapter offered a comprehensive examination of sustainability responsibility, covering its theoretical underpinnings and empirical research. It explores the concept and practice of sustainability reporting in the financial services sector, with a particular emphasis on the Ghanaian context. The chapter also investigates the principles of sustainability banking, the impact of sustainability reporting on firm performance, and the interplay with various financial metrics, including firm size, debt ratio, and financial performance. Additionally, it presented a conceptual framework that illustrates the relationships between independent variables, moderating variables, and the dependent variable, providing a structural overview of the study's key components.



## CHAPTER THREE

### RESEARCH METHODS

#### Introduction

The third chapter of this study is about the approach that was used to conduct the research. It explains the research design that was chosen, the group of firms that the study aimed to investigate, how the sample was selected, the tool that was used to collect data, the process of gathering information, the plan for analyzing data, model development, definition of, and measurement variables alongside the ethical guidelines that were rigorously applied throughout the research process to guarantee the integrity of the study.

The term research methodology represents the comprehensive strategy used to plan and execute a study, built on a solid theoretical foundation that guides data collection and analysis (Thurairajah et al., 2006) (as cited in Bonsu, 2018). In this study, the methodology encompasses the overall approach, theoretical underpinnings, and design used to conduct the research. Specifically, a cross-sectional design and quantitative approach were adopted, involving the collection and analysis of numerical data from secondary sources, namely annual reports of listed financial institutions. To investigate the relationships between variables, panel regression analysis was utilized, and the results were presented in tabular format.

#### Research Design

A research design is a comprehensive plan that outlines the approach and procedures for collecting, evaluating, and analyzing data to address research questions. As Sekaran and Bougie (2016, p. 95) aptly put it, research design is a systematic plan or framework developed to collect, assess, and interpret data,

with the ultimate goal of addressing and resolving research questions. This overarching strategy encompasses the fundamental concepts, assumptions, and specific techniques for data collection and analysis (Creswell, 2009).

The choice of a study design is influenced by its timeline, which can be either a snapshot taken cross-sectionally at a certain moment or over an extended period of time study spanning several years, as Saunders, Lewis, and Thornhill (2012) suggested. It is noteworthy that the duration remains unaffected by the research design., allowing researchers to choose between cross-sectional and longitudinal designs. This flexibility is crucial, as it enables researchers to tailor their approach to align with their research objectives, timeline, and resources. By carefully selecting the design of a study, researchers can be certain that their investigation is robust, reliable, and effective in addressing the research questions.

In a cross-sectional study, all information is gathered at once., typically over a short period, to address a specific research question. This approach is valued for its straightforwardness and cost-efficiency. As Sarantakos (2005) opined, cross-sectional design is particularly useful when collecting large amounts of data from a diverse group of respondents. Additionally, Creswell (2014) highlighted that, cross-sectional designs are suitable for studying a phenomenon at a single point in time. In the present study, data was gathered on companies' sustainability reporting (SR) and financial performance (FP) at a specific moment in time, hence adopting the cross-sectional design. By employing this design, a detailed picture of the relationship between SR and FP emerges, shedding light on this important dynamic.

In order to achieve the study objectives, a quantitative research strategy was adopted. This method was used to examine the SR practices and FP. To gather data, the study obtained annual reports of the firms under the current study from their websites, the Ghana Stock Exchange and [annualreportsghana.com](http://annualreportsghana.com)

### **Population**

The target population in research encompasses all individuals or entities relevant to the research topic, as highlighted by Sa'id and Madugu (2015) and Creswell (2014). This comprises the total population or all individuals or cases that the researcher wishes to analyze, generalize, or apply findings to. The target population of this study was all the Financial Institutions listed on the Ghana Stock Exchange between 2012 and 2021, which aligns with the research objectives.

The decision to select Financial Institutions and the Global Reporting Initiative instead of Non-Financial Institutions was influenced by the publication of GRI G4, FSSD which focuses on the sustainability practices of the financial services sector.

Again, previous studies have concentrated on the general guidelines of the GRI without providing the specific guidelines to measure SR in the financial services sector. Hence, this current study using the GRI G4, FSSD as a sustainability reporting indicator for the financial institutions.

Furthermore, previous studies have also focused on the sustainability reporting of companies that prioritize environmental sustainability, including mining, manufacturing, energy and oil extraction, construction, and transportation industries but not on the non-environmentally sensitive firms like

financial institutions. Hence, making this study suitable for the financial institutions.

### Sampling Procedures

In the present research a sample framework was developed to ensure the inclusion of all potential units that could be part of the sample (DiGaetano, 2013). The following criteria were used to identify and select firms for inclusion in the sample:

- i. The firm must belong to the financial services sector.
- ii. Audited financial statements for the years 2012-2021 must be publicly available for the firm.

The selection of firms for the sample frame was based on a condition that involved choosing annual reports from the period between 2012 to 2022. The reason for this choice was that these annual reports were the most up-to-date financial reports available at the time of data collection.

**Table 1: Sample Frame**

Industry categories	N	%
Banking	9	75.00
Asset management	1	8.33
Insurance	2	16.67
Total	12	100

Source: Researcher's own construct (2023)

The study identified 12 companies that fulfilled the conditions for being included in the sample frame. Rather than selecting a subset of companies, census approach was adopted for the study. This means that, all firms selected for the study framework were considered in the study. This decision was made

to ensure that every listed financial firm was included in the study and to meet any assumptions associated with using a specific analytical technique.

### **Data Collection Instruments**

To gather data, researchers utilize various tools including interviews, observations, questionnaires, and content analysis to gain a deeper consideration of participants' perspectives. The choice of instrument depends on the research objectives (Canals, 2017). This is supported by Sekaran and Bougie (2016) and Bryman (2012), who emphasized that research design, objectives, and questions guide the selection of data collection methods. Selecting the right instrument ensures alignment with the study's goals. This current study used content analysis to investigate the audited annual published reports, using the GRI G4, FSSD guidelines as a measuring tool for SR disclosure practices by the firms.

In the extant literature, different methods of content analysis like word count, sentences, presence or absence, chats and paragraphs have been used as indicators for collecting sustainability reporting information. See for example (Nobanee & Ellili, 2016; Thuy, Khuong, Canh & Liem, 2021; Wasara & Ganda, 2019; Attah-Botchwey et al. 2022). These researchers used 1 or 0 to indicate the existence or non-existence of SR information.

In this current study, dummy variable of 1 or 0 was used by the researcher to indicate the presence or absence of SR information. A score of 1 indicated that the information was disclosed, whereas a score of 0 indicated non-disclosure. This method was chosen because of its widespread and accurate means of collecting SR information as compared to other methods, such as word count, which only measures the frequency of words without considering their meaning or relevance in the context of the annual or sustainability reports.

## Data Collection Procedures

Data collection involves gathering information throughout a research project (Polit & Hungler, 1999). This study used a quantitative approach, obtaining documents from online sources like the Ghana Stock Exchange website and the sample firm's websites. This method aligns with the research design and objectives as argued by Saunders et al., (2016) and supports the collection of numerical data (Creswell, 2014). By downloading annual reports, financial statements, and GRI guidelines, the study collected quantitative data through documents and records.

To guarantee the accuracy and consistency of the secondary data, this study utilised audited financial statements and annual reports from the firms for a period of ten years (2012-2021). This exceeds the typical timeframe used in previous studies, which often relied on annual reports covering five years or less to assess sustainability reporting practices, hence, improving the robustness and consistency of the present study outcomes. See (Ajlbolad & Uwuigbe, 2013; Evana, 2017; Khan, Islam & Ahmed, 2010; Michael & Oluseye, 2014; Wasara & Ganda, 2019; Weber, 2017).

Since most of the above studies cover five-year reporting period or less, the researcher considered it significant to opt for a ten-year reporting period to properly assess the topic and its reported finding. In support of this assertion, Adams et al. (2010), posited that SR will exert a substantial influence on financial performance over an extended period. However, the effect may not be discernible in short-term studies. Consequently, this study employed a decade-long reporting period (2012-2021) to ascertain whether SR has a significant and

lasting effect on financial performance, thereby mitigating the limitations associated with short-term studies.

### **Definition of Variables**

The independent variables in this current study were Economic Disclosure Scores (ECO), Environmental Disclosure Scores (ENV), and Social Disclosure Scores (SOC), while the dependent variable was the performance of Financial Institutions measured by Return on Assets (ROA). The control variables were measured using Firm size (Fsize) and Debt ratio (DR). The symbols and scope of measurement for the variables were presented in Table 2 and their measurement scores in Appendix B.

### **Independent Variables**

The independent variable is the factor being manipulated or changed to observe its effect on the dependent variable. As noted by Almazari (2012), the independent variable exerts a considerable impact on the dependent variable, with a corresponding relationship between the two. This is supported by Kumar (2014), who argue that, the independent variable is the cause, and the dependent variable is the effect. Creswell (2014, p. 145) stresses that the independent variable is deliberately varied to examine its influence on the dependent variable. Almazari (2012) added that this influence is direct, resulting from the presence, increase, or decrease of the independent variable.

The variables that were used to explain the variation in the dependent variable were represented by sustainability reporting practices, including Economic Disclosure Scores (ECO), Environmental Disclosure Scores (ENV), and Social Disclosure Scores (SOC). This is in support of prior research studies

that have employed similar variables to investigate their impact on firm performance.

For instance, the studies by, Attah-Botchwey *et al.* (2022), Agustina *et al.* (2020) and, Nobanee and Ellili (2017) have used a blend of economic, environmental, and social disclosure scores as independent variables to investigate their collective effect on firm performance. These studies demonstrate the validity and reliability of using economic, environmental, and social disclosure practices as independent variables to investigate their effect on firm performance, supporting the objective of this current study.

### **Dependent Variables**

The dependent variable is the researcher's primary focus, measured or observed in an experiment (Kenny, 2011). It is influenced by independent variables as opined by Frank and Goyal (2003) and represents the outcome or response being studied (Creswell, 2014, p. 145). In this study, the dependent variable is the firm's performance, measured by ROA, which is affected by the independent variable.

In the extant literature, numerous studies have employed ROA as a dependent variable to investigate various aspects of firm performance. For instance, a study by Attah-Botchwey *et al.* (2022) and, Chen and Ittner (2015) investigated sustainability practices and firm performance, with ROA as dependent variable. Furthermore, a study by Mansi and Reeb (2015) explored board independence and firm performance, using ROA as the dependent variable. Hence, making ROA appropriate for this current study as dependent variable.



### Control Variables

The current study included other independent variables which were considered as control variables to account for differences in the firm’s performance and to avoid any potential impact on the results. Previous studies have employed various control variables, including firm size, debt ratio, age, industry, leverage, and ownership, to examine the relationship between SR and FP, as seen in Agyemang *et al.* (2020), Chiu *et al.* (2020), and Welbeck *et al.* (2017). In this current research, Firm size (Fsize) and Debt ratio (DR) were selected as the control variables.

**Table 2: Variables and Measurements**

Variables	Symbols	Measurement
Performance	ROA	Represents the firm's Return on Assets at time $i$ in year $t$ , measured by the ratio of pre-tax profits to total asset value.
Economic Disclosure Scores	ECO	Represent the Economic Disclosure practices at time $i$ in year $t$ as per GRI G4, FSSD guidelines.
Environmental Disclosure Scores	ENV	Represent the Environmental Disclosure practices at time $i$ in year $t$ as per GRI G4, FSSD guidelines.
Social Disclosure Scores	SOC	Represent the Social Disclosure practices at time $i$ in year $t$ as per GRI G4, FSSD guidelines.
Debt ratio	DR	Represents the Debt-to-Assets ratio of a firm at time $i$ in year $t$ , calculated as the proportion of total debts to total assets.
Firm size	Fsize	Represents the Total Asset of the firm at time $i$ in year $t$

Source: Researcher’s own construct (2023)

### Model Specification

The researcher developed the following regression model to test the effect of sustainability reporting on the financial performance of listed financial institutions in Ghana.

$$ROA_{it} = \beta_0 + \beta_1 ECO_{it} + \beta_2 ENV_{it} + \beta_3 SOC_{it} + \beta_4 DR_{it} + \beta_5 Fsize_{it} + u_{it}$$

Where:

<i>ROA</i>	= <i>return on assets</i>
<i>ECO</i>	= <i>economic disclosure scores</i>
<i>ENV</i>	= <i>environmental disclosure scores</i>
<i>SOC</i>	= <i>social disclosure scores</i>
<i>DR</i>	= <i>debt ratio, measured as ratio of total debts to total assets</i>
<i>Fsize</i>	= <i>firm size</i>
$\beta$	= <i>coefficients</i>
<i>u</i>	= <i>Stochastic error term</i>

### Data Processing and Analysis

The study's data underwent rigorous cleaning, coding, and quantitative analysis. Descriptive analysis presented the data in tables, while inferential analysis, comprising regression, ANOVA, and correlation, identified significant relationships. IBM-SPSS for Windows software (version 26.0) facilitated the analysis, with a significance level set at  $p < 0.05$  (two-tailed) to ensure robust findings.

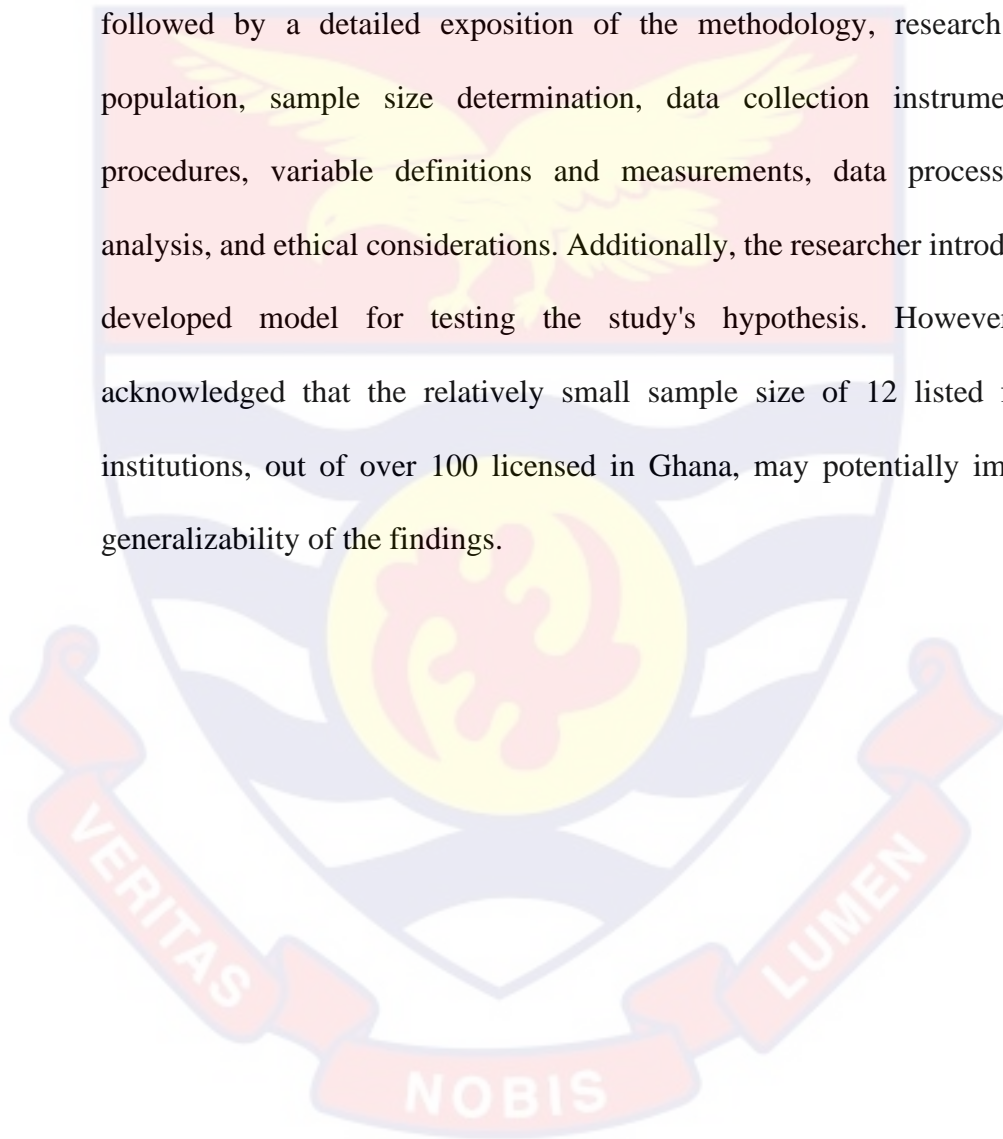
### Ethical Considerations

Guided by Sekaran's (2003) definition of ethics as the standards of behaviour for business researchers, this study adheres to the ethical standards for academic research established by the University of Cape Coast. In accordance with these principles, the research was conducted with rigorous attention to ethical considerations. Furthermore, all scholarly sources utilized in this study have been properly acknowledged, ensuring academic integrity.

Similarly, necessary permissions were obtained from the selected firms, guaranteeing the authenticity of the data.

### **Chapter Summary**

This chapter presented the research methodology employed to accomplish the study's objectives. It commenced with an introductory overview, followed by a detailed exposition of the methodology, research design, population, sample size determination, data collection instruments and procedures, variable definitions and measurements, data processing and analysis, and ethical considerations. Additionally, the researcher introduced the developed model for testing the study's hypothesis. However, it is acknowledged that the relatively small sample size of 12 listed financial institutions, out of over 100 licensed in Ghana, may potentially impact the generalizability of the findings.



## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### Introduction

In this chapter, the results of the study were analyzed and discussed in relation to the research objective, which is to investigate the impact of Sustainability Reporting (SR) on the Financial Performance (FP) of Listed Financial Institutions (LFI's) on the Ghana Stock Exchange and the relationships that exist between them. Secondary data was collected from 12 firms for a period spanning from 2012 - 2021, resulting in 120 annual reports, covering a ten-year period with 10 independent observations for each variable, totalling 720 observations. Out of these observations, 120 represented the dependent variable and 600 representing the independent variables. The chapter covers descriptive analysis, correlation analysis, regression analysis and discussion of the study's findings.

#### Descriptive Statistics

This section provides statistics that describes the variables employed in the study, including central tendencies, dispersion measures, normality tests, and correlation measures.

The summary of the minimum values, maximum values, means, and standard deviations for the core variables analyzed in the study were presented in Table 3. The findings indicate that, on average, the Economic Disclosure Scores (ECO) of sustainability reporting were the most frequently disclosed by the financial institutions, with a mean score of 0.6708 and a standard deviation of 0.2187. This suggests that these institutions tend to provide more economic

information in their sustainability reporting than information related to other dimensions.

Social Disclosure Scores (SOC) were the second most frequently disclosed dimension, with a mean score of 0.3485. This may reflect the fact that the financial sector is sensitive to social issues that could have negative implications for stakeholders and the broader economy.

Environmental Disclosure Scores (ENV), on the other hand, were the least frequently disclosed dimension, with a mean score of 0.0675. This could be due to the fact that the activities of financial institutions have a less direct impact on the environment than those of firms in industries such as mining and manufacturing. As a result, financial institutions placing less emphasis on environmental disclosures.

Despite the above, the financial performance indicator, Return on Assets (ROA), had an average score of 0.0543 and a standard deviation of 0.0759. Additionally, the mean scores for Fsize and DR were 0.3580 and 0.7273 respectively, with standard deviations of 0.7273 and 0.2404. The maximum and minimum values for ECO were 0.8333 and 0.1666, respectively, indicating a wide range between the highest and lowest values. In addition, both SOC and ENV had maximum values of 0.7058 and minimum values of 0.00 and 0.5 and 0.00, respectively. The ROA, which measured the firms' performance, had a maximum value of 0.6293 and a minimum value of -0.0585.

**Table 3: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
<i>PER</i>	120	-0.0585	0.62937	0.05434	0.07599
<i>ECO</i>	120	0.16667	0.83333	0.67083	0.21871
<i>ENV</i>	120	0	0.5	0.0675	0.12779
<i>SOC</i>	120	0	0.70588	0.34853	0.12968
<i>DR</i>	120	0.02223	0.94619	0.72731	0.2404
<i>Fsize</i>	120	0.00204	0.9999	0.3581	0.3113

Source: Field survey (2023)

### Correlation Analysis

The results from the nonparametric Spearman's rho analysis, examining the relationships between the variables, are summarized in Table 4. The reason why this test was performed was that, the normality test indicated a departure from normal distribution for ROA, ECO, ENV, Fsize, and DR. When the absolute correlation coefficient is " $\rho > 0.7$ " for two or more independent variables, it indicates multicollinearity. The correlation coefficients for ECO, ENV, and SOC in Table 4 were less than 0.7, indicating that, there was no significant concern for multicollinearity. Therefore, all variables were included in the subsequent regression analyses. A regression analysis was conducted where the dimensions of the independent variable were used to predict the dependent variable.

The correlation analysis results, showing the relationships between the study variables, are presented in Table 4. To assess the relationship between the variables being studied, a correlation analysis was executed by the researcher. There was a positive significant relationship between ECO and ROA as revealed by ( $\rho = 0.283^{**}$ ,  $p < 0.05$ ). The association between ENV and ROA on the other hand was ( $\rho = .0.152$ ”  $p < 0.05$ .) This indicate that as EVN increases,

performance also increase at about 15.2%. It was further revealed in the results that a negative relationship between SOC and ROA, ( $\rho = -0.059$ ,  $p < 0.05$ ) exists. Furthermore, the result ( $\rho = -0.097$ ,  $p < 0.05$ ) shows a weak and negative relationship between Fsize and ROA in the financial service sector as displayed by the results of the correlation analysis. However, the relationship between DR and ROA ( $\rho = -0.301$ ,  $p < 0.05$ ) as per the correlation analysis revealed a weak significant relationship.

**Table 4: Spearman’s rho Correlations Coefficient**

	ROA	ECO	ENV	SOC	Fsize	DR
ROA	1.000	0.283**	0.152	-0.059	-0.097	-0.301**
ECO		1.000	0.452**	0.441**	0.266**	0.172
ENV			1.000	0.625**	0.451**	0.191*
SOC				1.000	0.559**	0.469**
Fsize					1.000	0.698**
DR						1.000

\*\* Correlation is significant at the 0.01 level (2-tailed)

\*. Correlation is significant at the 0.05 level (2-tailed)

Source: Field survey (2023)

The results of the normality test distribution for the main variables investigated were shown in Table 5. The findings revealed that the ROA, ECO, ENV, Fsize, and DR scores varied from the assumption of normality because they had P-values less than 0.05. Therefore, as demonstrated by Kolmogorov-Smirnov and Shapiro-Wilk tests, the constructions were not thought to be normally distributed. The Shapiro-Wilk test, however, was more appropriate than the Kolmogorov-Smirnov test because the sample size was under 30. In

order to evaluate the bivariate connections between the variables, Spearman's rho correlation analysis was conducted using nonparametric tests.

**Table 5: Test of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ROA	0.232	120	0.000	0.613	120	0.000
ECO	0.292	120	0.000	0.708	120	0.000
ENV	0.426	120	0.000	0.593	120	0.000
SOC	0.305	120	0.000	0.858	120	0.000
Fsize	0.126	120	0.000	0.893	120	0.000
DR	0.347	120	0.000	0.679	120	0.000

a. Lilliefors Significance Correction

Source: Field survey (2023)

### Regression Analysis

This part of the research explores the relationship between Sustainability Reporting (SR) and Financial Performance (FP) of Listed Financial Institutions (LFI's) in Ghana. Three hypotheses were tested, and the regression analysis results are presented in Table 6. The findings show a significant relationship between the variables, with a P-value of 0.000. The results indicate a positive and significant impact of at least one independent variable on the dependent variable. The Adjusted R Squared value of 0.318 reveals that 31.8% of the variation in the dependent variable is explained by the independent variables, demonstrating a substantial relationship.



**Table 6: Hypothesis Test**

<b>Results of Regression Model</b>			
VARIABLES	B	S.E	P-value
ECO	0.094	(0.025)	0.003
ENV	0.024	(0.056)	0.672
SOC	-0.066	(0.072)	0.364
Fsize	0.035	(0.025)	0.171
DR	-0.190	(0.034)	0.000
R-squared	0.318		
Prob > F =	0.000		

NB: Dependent variable: ROA

Standard error in parenthesis

Source: Researcher’s own construct (2023)

## Discussion

### Effect of Economic Disclosure Scores on Financial Performance of LFI in Ghana

The hypothesis in Table 6 was validated at a 5% significance level. The coefficient of the economic disclosure scores (ECO) and its P-value were 0.094 and 0.003 respectively. This means that, the effect of ECO on Financial Performance (FP) measured by return on assets (ROA) was significantly positive for Listed Financial Institutions (LFI’s) in Ghana. Hence, validating H1. The results revealed that, an improvement in the economic performance by the financial services sector of a one-unit measure will correspond to a sharp increase of 9.4% in their ROA. The results also showed that ECO was the highest among the other sustainability reporting scores.

Consistent with Attah-Botchwey et al. (2022), Nobanee and Ellili (2017), and Shrivastav and Kalsie (2017). Their results indicated that economic disclosure had a more positive influence on Financial Performance (FP) compared to other sustainability reporting dimensions. This implies that the firms examined tended to emphasize economic transparency, which in turn contributed to improved financial performance

However, Attah-Botchwey et al. (2022) studied sustainability reporting (SR) and financial performance (FP) of Banks in Africa. The study focused on twenty (20) selected banks from Ghana, Nigeria, and South Africa. The quantitative content analysis was employed to quantify the SR measure. The study was guided by the SR framework of the GRI with Return on Assets and Tobins Q as performance indicators. The study finds that economic disclosure was the highest SR practice. A study by Andania and Yadnya (2020) also concluded that, economic indicators have a positive significant effect and are the most disclosed dimensions of SR.

In a related study, Michael and Oluseye (2014) yielded different results from the current study. Their research showed that firms disclosed more social information than other dimensions of sustainability reporting. The discrepancies between the findings of the two studies could be due to the variations in the methods of disclosing sustainability reporting information adopted by each study. The current study used the Financial Service Sector Disclosure guidelines developed by GRI for financial institutions, while Michael and Oluseye (2014) used the GRI general disclosure guidelines for all types of institutions.

The literature offers two explanations for businesses' tendency to release more economic information. One reason is the regulatory requirements for financial disclosure (Aboagye-Otchere et al., 2012). Another perspective suggests that increased economic transparency can lead to boosted company value and reputation sustainably, as argued by (Bonsón & Bednárová, 2015; Shrivastav & Kalsie, 2017).

Furthermore, Andania and Yadnya, (2020) and, Sahore and Verma, (2017) support the findings of the current study by arguing that, there is a positive effect of economic disclosure on FP. Notwithstanding, it has been argued in the literature that, the demand by stakeholders for sustainability reporting kept on increasing. Hence, ECO positively influencing firm profitability.

Turley-McIntyre et al., (2016) asserted that 86% of stakeholders use sustainability disclosure practices to search for information about firms. Therefore, stakeholders motivate firms that consistently engage in sustainability reporting practice to improve performance. In a related study, Nobanee and Ellili (2017), posited that, the relationship between ECO and FP was nonsignificant.

The researcher therefore, argues that, the results obtained from this current study could be associated with the force that compels the financial services sector industry to disclose economic information in Ghana.

## **Effect of Environmental Disclosure Scores on the Financial Performance of LFI in Ghana.**

The literature contains persistent debates regarding the effect of environmental reporting on firm performance. While some studies have demonstrated a notable connection between the two variables, others have failed to establish a significant relationship between them, (Attah-Botchwey et al., 2022).

The results in Table 6 show that the environmental disclosure scores (ENV) coefficient (0.024) has no significant impact on Financial Performance (FP). Despite the positive coefficient, the P-value (0.672) exceeds 5%, indicating a lack of statistical significance. Hence, failed to reject the null hypothesis. The findings suggest that a one-unit increase in ENV may correspond to a 2.4% improvement in FP, but this relationship is not statistically significant.

The current study's findings align with that of Attah-Botchwey et al. (2022), Andania & Yadnya, (2020), Evana, (2017), and Nobanee & Ellili, (2017), who argued that banks' environmental disclosures do not significantly impact their performance. While the current study indicates that there is no significant relationship between environmental reporting and Return on Assets for listed financial institutions on the GSE, other studies have found a significant relationship between environmental disclosures and firm performance.

For instance, Attah-Botchwey et al. (2022), Xi et al. (2022), and Chiu et al. (2020) provided contrasting results on the relationship between environmental reporting and firm performance. These inconsistencies can be associated to the differences in tools for performance measures and disclosure

dimensions. In contrast, this study focused on three dimensions, including economic, environmental, and social disclosures, while Xi et al. (2022) only focused on environmental disclosure. Similarly, the current study used Return on Assets as a performance measure, while Attah-Botchwey et al. (2022) adopted Tobin's Q.

According to the current study's findings, listed financial institutions on the GSE prioritize economic items over environmental items. This can be due to the fact that, operations of financial institutions have a minimal direct impact on the environment compared to companies in the manufacturing and mining sectors. Consequently, financial institutions might prioritize environmental disclosures less, and efforts to enhance environmental transparency could potentially harm their short-term financial performance. However, this study aligns with existing research in suggesting that environmental reporting may not yield immediate financial benefits but can contribute to sustainable advantages, such as bolstering the good image of the firm, legitimacy, overall value and among others, (Attah-Botchwey et al. 2022).

### **Effect of Social Disclosure Scores on the Financial Performance of LFI in Ghana**

The study findings did not support hypothesis H3. The study found that social disclosure scores have no significant effect on the financial performance of listed financial institutions on the GSE. As illustrated in Table 6, a decrease of one unit in social disclosure could result in 6.6% decline in return on assets, but this result was not statistically significant as evidenced by the coefficient (-0.066) and P-value (0.364). The current study's findings align with that of Friedman's (1962), who argued that a company's ultimate aim is to enhance the

economic prosperity of its shareholders, hence, any objectives unrelated to financial gain may impede the firm's performance.

Nobanee and Ellili (2017), and Evana (2017) support the finding of this study and argue that, there is no significant impact of social disclosures on banks performance. Therefore, disclosing more information related to the social dimension will not affect their return on assets. However, Attah-Botchwey et al. (2020), and Andania and Yadnya, (2020) argued that there is a notable relationship between a company's social disclosures and its overall performance.

Mishra and Suar (2010) explained that firms disclose social information because irresponsible behaviour can provoke negative reactions from stakeholders such as boycotts, reduced consumption, legal action, and negative word-of-mouth. On the other hand, responsible social practices can enhance a company's reputation, leading to a positive perception by stakeholders, and potentially strengthen business financial performance. This suggests that businesses are expected to establish a social contract with their communities. In line with this, Brown and Dacin (1997) posit that consumers have a higher probability to demand products from socially responsible companies.

#### **Effect of Firm Size, Debt Ratio on the Financial Performance of LFI in Ghana.**

The current research utilized two control variables: Firm size (Fsize) and Debt ratio (DR). As depicted in Table 6, the coefficient for both variables were (0.035, -0.190) and their respective P-values been (0.171, 0.000). These results suggest an effect which is positive but insignificant for Fsize on return on assets (ROA). Thus, one-unit improvement in Fsize will result in 1.71% increase in

ROA. The meaning of this result is that, an increase in the financial institution's size will correspond to an increase in their level of performance but such result is statistically insignificant.

Nonetheless, this result is in contrast with the findings by Okpala and Iredele, (2019). They argued that, Fsize had a significant effect on the market value of firms. Michael and Oluseye, (2014) in support of the current finding, argued that size of a firm does not influence its sustainable development practice. The difference in these findings could be attributed to the type of firms sampled in the study. While Michael and Oluseye, (2014) adopted banks as the firms for the study, Okpala and Iredele, (2019) adopted different group of firms including banks.

The relationship between DR and FP of financial institutions is complex and varies across different studies and countries. Some studies suggest that higher DR may be associated with higher profitability. Others assert that high DR levels financing may result in lower shareholder returns. This current study's findings revealed a relationship which was significantly negative between DR and FP of LFI's on the GSE. The study reported that a one-unit decrease in DR can result in about a 19% decrease in FP measured by ROA, all other things being equal.

Henceforth, the researcher argues that, financing debt by firms under the current study had a negative effect on their FP. In support of this finding, Chen and Wong (2004), reported that the relationship between DR and ROA for banks in Hong Kong was negative. Conversely, Gande and Puri (2004) found that higher DR was associated with higher ROA for banks. This finding suggests

that financial institutions that use higher levels of debt financing are likely to experience a drop in their financial performance.

### **Chapter Summary**

The main findings and discussion of the study were presented in this section. It first provided an overview of the variables' descriptive statistics before delving into the inferential statistics. The outcomes were then discussed in accordance with the study objectives. To test the hypothesis, a statistical analysis using regression modelling was performed.

The analysis results revealed that there was a significant and positive correlation between ECO and FP. However, there was no significant relationship found between FP and ENV, and SOC.

In conclusion, the results of the present study found that there is no significant relationship between Fsize and FP. However, the relationship between DR and FP was statistically significant with a negative effect. The results obtained from this current study were different and unique from prior studies due to the GRI G4, FSSD guidelines adopted for the sustainability reporting measure.



## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

This chapter presents a comprehensive summary of the study's key findings, conclusions, and recommendations. It commences with a succinct recapitulation of the primary results, synthesizing the essential discoveries from the study. This is followed by a detailed exposition of the conclusions derived from the findings, highlighting the implications and significance of the study. Subsequently, evidence-based recommendations are presented, tailored to address the research questions and objectives. Finally, the chapter concludes with suggestions for future studies, outlining potential avenues for further studies.

#### Summary of the Study

Sustainability reporting (SR) is a voluntary action that involves disclosing the impact of a firm's economic, social, and environmental activities for the benefit of stakeholders and to enhance its relationship with the immediate community. The study aimed to examine the effect of economic, environmental, and social disclosures on the financial performance (FP) of listed financial institutions in Ghana. To achieve this, the study investigated the sustainability reporting practices of these institutions and a quantitative research approach was employed. The study's key findings are summarized according to its objectives as follows:

The study's first objective was to determine whether or not Economic Disclosure Scores (ECO) by Listed Financial Institutions in Ghana have effect on their FP. It was revealed in the study that, the effect of ECO on FP measured

by return on assets (ROA) was positively significant. This result suggests that, the FP for all the listed financial institution will experience 9.4% increase, as a result of a one-unit improvement in their ECO, with all other things held constant. The result could be attributed to the strict adherence to legal requirements to disclose economic information by firms in Ghana to satisfy the needs of stakeholders, the general public and to strengthen the social relationship that exist between them and their communities.

Furthermore, the study sought to determine the effect of Environmental Disclosure Scores (ENV) on FP of firms understudied. Based on the study's result, there was no significant effect of the ENV on the FP of firm's understudy. Therefore, the result suggesting that, all other things being constant FP will increase by 2.4% when there is a one-unit improvement in ENV. But such an outcome was statistically insignificant. The results also suggest that, the amount of money or resources spent by the financial institutions listed on Ghana Stock Exchange to combat the growing environmental menace in the financial service sector is insignificant as compare to their performance. For the purpose of improving the ENV of the listed financial institution in the country, the GRI G4, FSSD assessment measures and the Ghana Sustainable Banking Principles must be strictly followed. Again, non-environmental sensitive firms like the firm's understudy must be rewarded for engaging in environmental sustainability.

Notwithstanding, the study examined the effect of Social Disclosure Scores (SOC) on FP of LFI in Ghana. The result indicated that, SOC had no significant effect on the FP of listed financial institutions on the GSE. This outcome indicated that a one-unit reduction in the SOC would lead to a 6.6% reduction of the financial performance of the firm measured by ROA. However,

this result was statistically insignificant. The results imply that contributions made by firms in the financial services sector listed on the GSE towards the development of communities within which they operate do not correspond to their financial performance. Hence, they are neglecting or not paying much attention to the social contract that exists between them and their stakeholders.

To increase SOC, Ghana Sustainable Banking Principles must be fully implemented by all financial institutions in the country and the GRI G4, FSSD guidelines.

Finally, the study determined the moderating effect of Firm size (Fsize) and Debt ratio (DR) on the FP of LPI in Ghana. The findings from this current study suggest that, the effect of Fsize on ROA was positively insignificant. Thus, one-unit decrease in Fsize will result in a 3.5% decline in ROA. The result indicates that, an upward improvement in Fsize will result in a corresponding upward improvement in ROA. But such an improvement is statistically insignificant. Also, the study finds a significant negative effect of the DR on ROA of LFI's on the GSE. This result indicated that, a one-unit decrease in DR can result in about a 19% drop in the firm's FP measured by ROA with all other things being equal. This result supports the argument in the literature that, the quantum of resources spent to finance debt by firms under the current study could negatively influence their financial performance.

### **Conclusions**

The practice of Sustainability Reporting (SR) allows companies to make information accessible to their sustainable performance with the general public and other stakeholders. Making informed financial decisions or promoting ethical reporting practices are both possible with the use of this knowledge.

Previous studies on SR practices and financial institution performance in the sub-Saharan African nations, such as Ghana, have revealed a scarcity of research employing the GRI G4, FSSD guidelines as a measure of sustainability reporting. This confirms the necessity for more studies to determine how SR practices affect financial success. Consequently, the study's objective is to ascertain how SR affects the FP of listed financial institutions (LFI) in Ghana, utilizing legitimacy theory, stakeholder theory, and institutional theory.

This study adopted a quantitative approach, employing a cross-sectional design and secondary data from 2012 to 2021. Data was collected from annual reports of financial institutions listed on the Ghana Stock Exchange, applying GRI G4, FSSD guidelines to investigate sustainability disclosure practices. Regression analysis using panel data was carried out, with the results displayed in tables. The study investigated sustainability reporting (SR) and financial performance (FP). The FP was measured by ROA and SR by ECO, ENV, and SOC scores. Firm size and Debt ratio were employed as control variables to provide a comprehensive analysis.

After analyzing the data, it was discovered that the use of SR has a positive effect on the FP of LFI in Ghana. Specifically, ECO showed a significant positive correlation with ROA, indicating that the financial service sector is thriving due to its engagement in SR related activities. This success can potentially encourage other firms to follow suit and engage in similar practices. Additionally, regulatory bodies such as the Bank of Ghana and others have the mandate to influence SR in the financial services sector of Ghana.

It was expected that, the firms under the current study might have been doing much in environmental disclosure practices, but the study results proved

otherwise. The study found that there was no significant relationship between ENV and the FP of the firms being studied. This finding supports the argument in the literature that, the activities of financial institutions have no immediate environmental consequences, thereby placing less attention to their sustainability. This is an indication most firms are not dedicated to environmental matters and as a result do not consider them in their decision-making process. To address this, the Central Bank and other regulatory bodies in the financial service sector should enforce mandatory disclosure requirements. Perhaps, Ghana would have the opportunity to achieve the objectives of the Sustainable Development Goals (SDG) by 2030.

The study also revealed a nonsignificant effect of SOC on the FP of the firms. This result is alarming and urgently needs to be addressed. This suggests that the firms were not socially responsible towards the communities within which they operate. Meritorious awards must be instituted by the regulatory bodies to reward firms been engaged in social development within their communities.

There was also an indication from the data analysis that, Fsize had a positive nonsignificant effect on the FP of the firms. Thus, the size of a firm does not determine its SR practice. Conversely, DR had a negative and significant effect on the FP, showing that the cost of debt finance by the LFI on the GSE negatively influence their performance measured by ROA.

Based on the researcher's current understanding, this study represents a pioneering effort to explore the effect of SR practices of listed financial institutions on the GSE, employing the GRI G4, FSSD guidelines as a sustainability reporting metric. This research significantly expands the current

understanding of the topic by investigating the relationship between SR and FP of listed financial institutions in Ghana. Additionally, this present study introduced a novel framework for evaluating SR practices by financial institutions in Ghana, based on the GRI G4, FSSD guidelines.

### **Recommendations**

Based on the findings and conclusions, the following recommendations are put forward:

1. The financial services sector and other firms in Ghana must adopt the GRI content index template to report sustainability practices in their financial statements or sustainability reports. This will make sustainability reporting practices easily identifiable and accessible.
2. It is important for Bank of Ghana to enforce the Ghana Sustainable Banking Principles launched in November 2019. These principles provide guidance for effective sustainable reporting practices by banks and other financial institutions in the country.
3. The financial services sector needs to put more effort into fostering the growth of the communities where it operates. This helps to strengthen the social contract between the institutions and their stakeholders, ultimately making the institutions more socially responsible.
4. To promote sustainability, Government of Ghana ought to establish a system of rewards and tax benefits for companies that openly disclose their sustainable practices in their yearly reports and on their websites.
5. To ensure effective implementation of sustainability regulations, it is essential for Government of Ghana to provide regulatory bodies with

sufficient resources and support, enabling them to efficiently monitor and enforce compliance.

### **Suggestions for Further Research**

The practice of sustainability reporting (SR) among companies is still developing in Ghana. However, some critics may argue that the study did not include financial institutions in Ghana that are not listed. The use of performance measures such as Return on Equity, Tobin's Q, Earnings Per Share, and Return on Capital Employed can be argued similarly. To broaden the scope, future studies could include unlisted financial institutions and use any of the aforementioned measures as a performance indicator.

Moreover, the cross-sectional design of this study limits its ability to establish definitive conclusions regarding causality or directionality. A reciprocal relationship may exist between sustainability reporting (SR) practices and financial performance (FP), suggesting a potential interplay between these two variables. Consequently, future research should aim to explore the bidirectional dynamics between SR practices and FP to elucidate the extent to which SR practices influence the financial performance of listed financial institutions (LFIs) in Ghana.

Finally, the study's scope could be expanded to encompass other nations and industries.

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APPENDICES

APPENDIX A

Results of regression analysis for the effect of ECO, ENV, SOC, Fsize and DR on ROA

Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.589 <sup>a</sup>	0.347	0.318	0.06276074

a. Predictors: (Constant), DR, ECO, ENV, Fsize, SOC

b. Dependent Variable: ROA

ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.238	5	0.048	12.095	0.000 <sup>b</sup>
	Residual	0.449	114	0.004		
	Total	0.687	119			

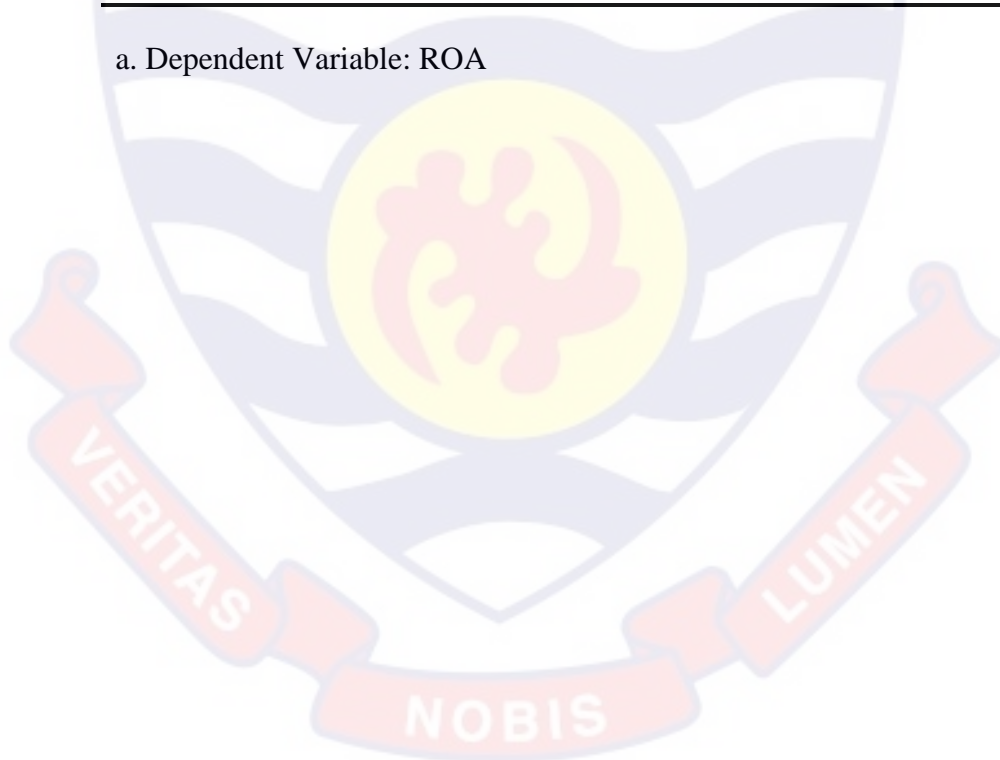
a. Dependent Variable: ROA

b. Predictors: (Constant), DR, ECO, ENV, Fsize, SOC

**Coefficients<sup>a</sup>**

Model		Unstandardized	Std.	Standardized	t	Sig.
		Coefficients	Error	Coefficients		
		B		Beta		
1	(Constant)	0.138	0.025		5.582	0.000
	ECO	0.094	0.031	0.272	3.010	0.003
	ENV	0.024	0.056	0.040	0.424	0.672
	SOC	-0.066	0.072	-0.112	-0.912	0.364
	Fsize	0.035	0.025	0.143	1.379	0.171
	DR	-0.190	0.034	-0.602	-5.608	0.000

a. Dependent Variable: ROA



**APPENDIX B**

**List of Firms and their Variable Scores**

YEAR	LIST OF FIRMS	ROA	ECO	ENV	SOC	Fsize	DR
2012	ACCESS BANK GHANA	0.05823	0.83333	0	0.41176	0.07973	0.7867
	ADB	0.01848	0.5	0	0.35294	0.14442	0.86346
	CALL BANK	0.05549	0.66667	0	0.41176	0.11593	0.824
	ECOBANK GHANA	0.05806	0.83333	0	0.35294	0.33788	0.86488
	ENTERPRISE INSURANCE	0.26151	0.83333	0	0.17647	0.00561	0.03447
	GCB BANK	0.06339	0.66667	0	0.35294	0.29721	0.90493
	MAGA CAPITAL	0.04832	0.16667	0	0.05882	0.00204	0.36656
	REPUBLIC BANK	0.02674	0.83333	0	0.05882	0.05878	0.78333
	SIC	-0.053	0.5	0	0.35294	0.01421	0.52416
	SOCIETE GENERAL	0.03773	0.66667	0	0.35294	0.10889	0.84405
	STANDARD CHARTERED BANK	0.07131	0.83333	0	0.41176	0.23907	0.86977
	THE TRUST BANK	0.02961	0.66667	0	0.35294	0.42118	0.94619
	ACCESS BANK GHANA	0.07239	0.83333	0.1	0.47059	0.09913	0.78248
	ADB	0.05175	0.66667	0	0.35294	0.16218	0.82673
2013	CALL BANK	0.08046	0.66667	0	0.35294	0.1559	0.81899
	ECOBANK GHANA	0.05662	0.83333	0.2	0.41176	0.46244	0.87953
	ENTERPRISE INSURANCE	0.31921	0.83333	0	0.17647	0.0076	0.02868
	GCB BANK	0.09178	0.66667	0	0.35294	0.33911	0.86814
	MAGA CAPITAL	0.27922	0.16667	0	0.05882	0.00287	0.27373
	REPUBLIC BANK	0.04885	0.83333	0	0.41176	0.09731	0.83177
	SIC	0.00371	0.16667	0	0.41176	0.01518	0.51669
	SOCIETE GENERAL	0.04122	0.83333	0	0.35294	0.12166	0.84078
	STANDARD CHARTERED BANK	0.09144	0.83333	0.3	0.41176	0.29884	0.83704

	THE TRUST BANK	0.04311	0.66667	0	0.35294	0.46299	0.91228
	ACCESS BANK GHANA	0.07167	0.83333	0.1	0.47059	0.17187	0.83114
	ADB	0.01608	0.66667	0	0.35294	0.21567	0.84059
	CALL BANK	0.07179	0.83333	0	0.41176	0.27075	0.8551
	ECOBANK GHANA	0.07647	0.83333	0.2	0.35294	0.56696	0.86174
	ENTERPRISE INSURANCE	0.62937	0.83333	0	0.17647	0.01108	0.02223
	GCB BANK	0.09035	0.83333	0	0.35294	0.42328	0.8441
2014	MAGA CAPITAL	0.2262	0.16667	0	0.05882	0.0065	0.39148
	REPUBLIC BANK	0.05162	0.83333	0	0.35294	0.13244	0.82175
	SIC	-0.0526	0.16667	0	0.41176	0.01754	0.57459
	SOCIETE GENERAL	0.04237	0.83333	0	0.35294	0.16759	0.86755
	STANDARD CHARTERED BANK	0.07838	0.83333	0.2	0.41176	0.35063	0.84915
	THE TRUST BANK	0.04849	0.66667	0	0.35294	0.46622	0.90193
	ACCESS BANK GHANA	0.05062	0.83333	0.2	0.47059	0.24244	0.85194
	ADB	-0.047	0.66667	0	0.35294	0.21341	0.84402
	CALL BANK	0.06362	0.66667	0.1	0.47059	0.3351	0.84904
	ECOBANK GHANA	0.06999	0.83333	0.4	0.41176	0.65875	0.86626
	ENTERPRISE INSURANCE	0.11316	0.83333	0	0.17647	0.0125	0.03124
	GCB BANK	0.07566	0.66667	0	0.41176	0.46296	0.82361
2015	MAGA CAPITAL	0.10808	0.16667	0	0.05882	0.00962	0.43013
	REPUBLIC BANK	-0.0237	0.83333	0	0.41176	0.15664	0.88524
	SIC	0.05823	0.66667	0	0.23529	0.02084	0.61168
	SOCIETE GENERAL	0.03232	0.16667	0	0.41176	0.19922	0.8675
	STANDARD CHARTERED BANK	0.02703	0.66667	0	0.41176	0.33694	0.83525
	THE TRUST BANK	0.03544	0.66667	0	0.35294	0.49043	0.8568
	ACCESS BANK GHANA	0.02577	0.83333	0.2	0.47059	0.26796	0.84007
2016	ADB	-0.0348	0.5	0	0.35294	0.30355	0.85018
	CALL BANK	0.00336	0.66667	0.1	0.41176	0.35994	0.86032

	ECOBANK GHANA	0.05697	0.83333	0.2	0.41176	0.80255	0.88135
	ENTERPRISE INSURANCE	0.14909	0.83333	0	0.17647	0.0138	0.04528
	GCB BANK	0.07385	0.66667	0	0.41176	0.60496	0.8322
	MAGA CAPITAL	-0.0161	0.16667	0	0.05882	0.01058	0.49209
	REPUBLIC BANK	-0.0307	0.83333	0	0.41176	0.18562	0.92396
	SIC	0.03501	0.66667	0	0.23529	0.01874	0.5669
	SOCIETE GENERAL	0.03752	0.16667	0	0.41176	0.24488	0.8642
	STANDARD CHARTERED BANK	0.07901	0.83333	0.4	0.41176	0.43736	0.82504
	THE TRUST BANK	0.02222	0.5	0	0.35294	0.52081	0.8638
	ACCESS BANK GHANA	0.01831	0.83333	0.2	0.47059	0.31996	0.8535
	ADB	0.01335	0.66667	0	0.35294	0.35451	0.86488
	CALL BANK	0.04946	0.83333	0.1	0.47059	0.42126	0.84631
	ECOBANK GHANA	0.03932	0.83333	0.2	0.41176	0.90987	0.88715
	ENTERPRISE INSURANCE	0.0404	0.83333	0	0.17647	0.02356	0.38349
2017	GCB BANK	0.03232	0.83333	0	0.41176	0.95582	0.88354
	MAGA CAPITAL	0.01009	0.16667	0	0.05882	0.01093	0.49808
	REPUBLIC BANK	0.02725	0.83333	0	0.41176	0.20791	0.89121
	SIC	0.06467	0.66667	0	0.23529	0.02167	0.53312
	SOCIETE GENERAL	0.04553	0.16667	0	0.41176	0.27897	0.81401
	STANDARD CHARTERED BANK	0.0884	0.83333	0	0.41176	0.4777	0.80725
	THE TRUST BANK	0.01962	0.66667	0	0.35294	0.61546	0.88562
	ACCESS BANK GHANA	0.02027	0.83333	0.2	0.47059	0.35409	0.82159
	ADB	0.00947	0.66667	0	0.35294	0.35974	0.82217
	CALL BANK	0.04261	0.83333	0.2	0.41176	0.54059	0.85857
2018	ECOBANK GHANA	0.04791	0.83333	0.2	0.41176	0.9999	0.87437
	ENTERPRISE INSURANCE	0.11193	0.83333	0	0.17647	0.04389	0.07909
	GCB BANK	0.04197	0.66667	0	0.41176	0.9999	0.87537
	MAGA CAPITAL	0.0445	0.16667	0	0	0.0125	0.51673

	REPUBLIC BANK	0.01584	0.83333	0	0.41176	0.2858	0.82585
	SIC	0.11855	0.66667	0	0.23529	0.05188	0.43307
	SOCIETE GENERAL	0.03066	0.5	0.1	0.41176	0.34314	0.79548
	STANDARD CHARTERED BANK	0.05466	0.5	0.2	0.35294	0.59615	0.82424
	THE TRUST BANK	0.01875	0.66667	0	0.35294	0.66231	0.89564
	ACCESS BANK GHANA	0.04671	0.83333	0.2	0.47059	0.35409	0.8294
	ADB	0.00391	0.83333	0	0.35294	0.35974	0.82668
	CALL BANK	0.03437	0.83333	0.5	0.52941	0.54059	0.86351
	ECOBANK GHANA	0.04812	0.83333	0.3	0.47059	0.9999	0.8662
	ENTERPRISE INSURANCE	0.06095	0.83333	0	0.35294	0.04389	0.09589
2019	GCB BANK	0.04548	0.66667	0	0.41176	0.9999	0.86695
	MAGA CAPITAL	0.04149	0.16667	0	0.11765	0.0125	0.53023
	REPUBLIC BANK	0.02769	0.83333	0	0.41176	0.2858	0.83266
	SIC	0.02599	0.66667	0	0.23529	0.05188	0.49749
	SOCIETE GENERAL	0.03976	0.5	0	0.35294	0.34314	0.81954
	STANDARD CHARTERED BANK	0.05568	0.83333	0	0.35294	0.59615	0.84684
	THE TRUST BANK	0.01806	0.66667	0	0.35294	0.66231	0.89564
	ACCESS BANK GHANA	0.06104	0.83333	0.2	0.47059	0.58238	0.81934
	ADB	0.01709	0.5	0	0.35294	0.57158	0.85118
	CALL BANK	0.03481	0.83333	0.4	0.70588	0.79034	0.85931
	ECOBANK GHANA	0.04872	0.83333	0.4	0.64706	0.9999	0.84742
	ENTERPRISE INSURANCE	0.05282	0.33333	0	0.35294	0.0489	0.09816
2020	GCB BANK	0.03928	0.66667	0	0.41176	0.9999	0.86627
	MAGA CAPITAL	-0.0585	0.16667	0	0	0.01421	0.52156
	REPUBLIC BANK	0.02189	0.83333	0	0.41176	0.36478	0.83326
	SIC	0.02634	0.66667	0	0.23529	0.05464	0.4799
	SOCIETE GENERAL	0.04333	0.66667	0	0.35294	0.51152	0.81905

	STANDARD CHARTERED BANK	0.08409	0.83333	0.3	0.35294	0.80317	0.81737
	THE TRUST BANK	0.01702	0.66667	0	0.35294	0.87624	0.91003
	ACCESS BANK GHANA	0.06687	0.83333	0.4	0.52941	0.74913	0.81811
	ADB	0.01954	0.83333	0	0.35294	0.64541	0.85463
	CALL BANK	0.03253	0.83333	0.5	0.47059	0.9999	0.87439
	ECOBANK GHANA	0.04964	0.83333	0.5	0.64706	0.9999	0.85124
2021	ENTERPRISE INSURANCE	0.06459	0.83333	0	0.35294	0.05139	0.09795
	GCB BANK	0.04435	0.66667	0	0.41176	0.9999	0.86052
	MAGA CAPITAL	-0.0441	0.16667	0	0	0.01558	0.5239
	REPUBLIC BANK	0.02973	0.83333	0.2	0.41176	0.42263	0.83675
	SIC	0.10589	0.66667	0	0.23529	0.06884	0.46614
	SOCIETE GENERAL	0.05186	0.66667	0.1	0.35294	0.5437	0.81082
	STANDARD CHARTERED BANK	0.06862	0.66667	0	0.35294	0.9999	0.83763
	THE TRUST BANK	0.01842	0.66667	0	0.35294	0.9999	0.89153



## APPENDIX C

### Check list for Sustainability Disclosure Practices

ITEM OF DISCLOSURE	CATEGORY
Community development	Economic
Staff volunteerism	Economic
Contributions in-kind for services or equipment	Economic
Gift or donations in-kind	Economic
Financial assistance received from government	Economic
Senior Management within the Local Community	Economic
Direct green gases.	Environment
Energy indirect green gases.	Environment
Other indirect green gases	Environment
Reduction of energy consumption	Environment
Water withdrawal	Environment
Water reused and recycled	Environment
Site of operations owned, leased, or managed in protected area	Environment
Waste weight by type and method of disposal	Environment
Fines for non-compliance of environmental regulations and laws	Environment
Expenditures for environmental investment and protection.	Environment
Verbal or physical attacks by customers	Social
Robbing of financial institutions	Social

Reporting requirements on criminal activities	Social
Policies for education, counselling and training	Social
Point of access in economically disadvantage areas	Social
Plans of improving access in economically disadvantage areas	Social
Product or service designed to offer special social benefit	Social
Product or service designed to offer special environmental benefit	Social
Assessment of audit of the environment, social policies and risk.	Social
Entities collaborated on eco-friendly and social concerns	Social
Environmental and social screening of assets	Social
Regulations for responsible development and marketing of financial solutions	Social
Programs to promote financial understanding	Social
Structure of the governance body	Social
Corruption incidents and their respective actions taken	Social
Fines for non-adherence to statutory obligations	Social
Fines for failing to adhere to legal and regulatory standards for product or service use	Social